



Fig. 1a Prior Art Cone Design

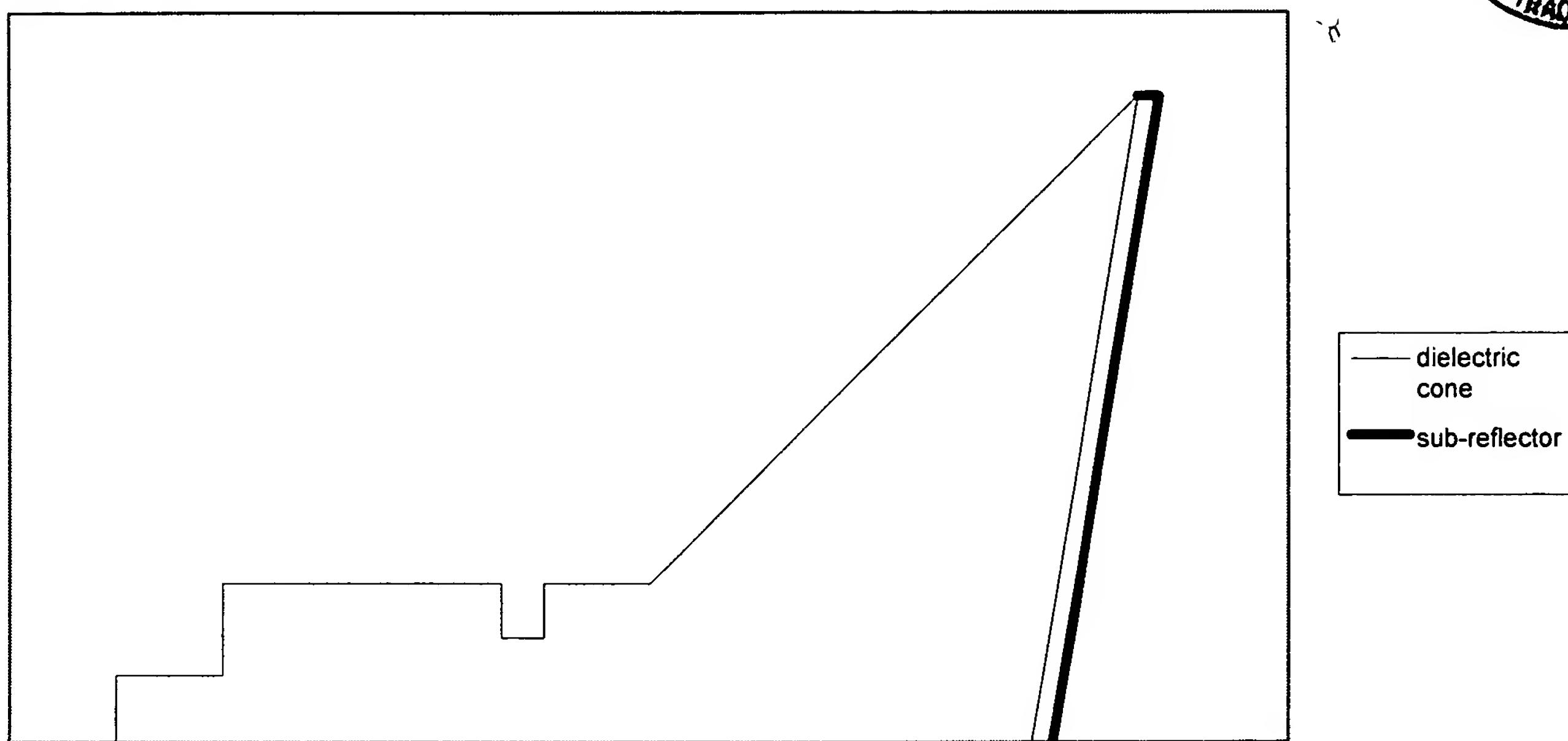
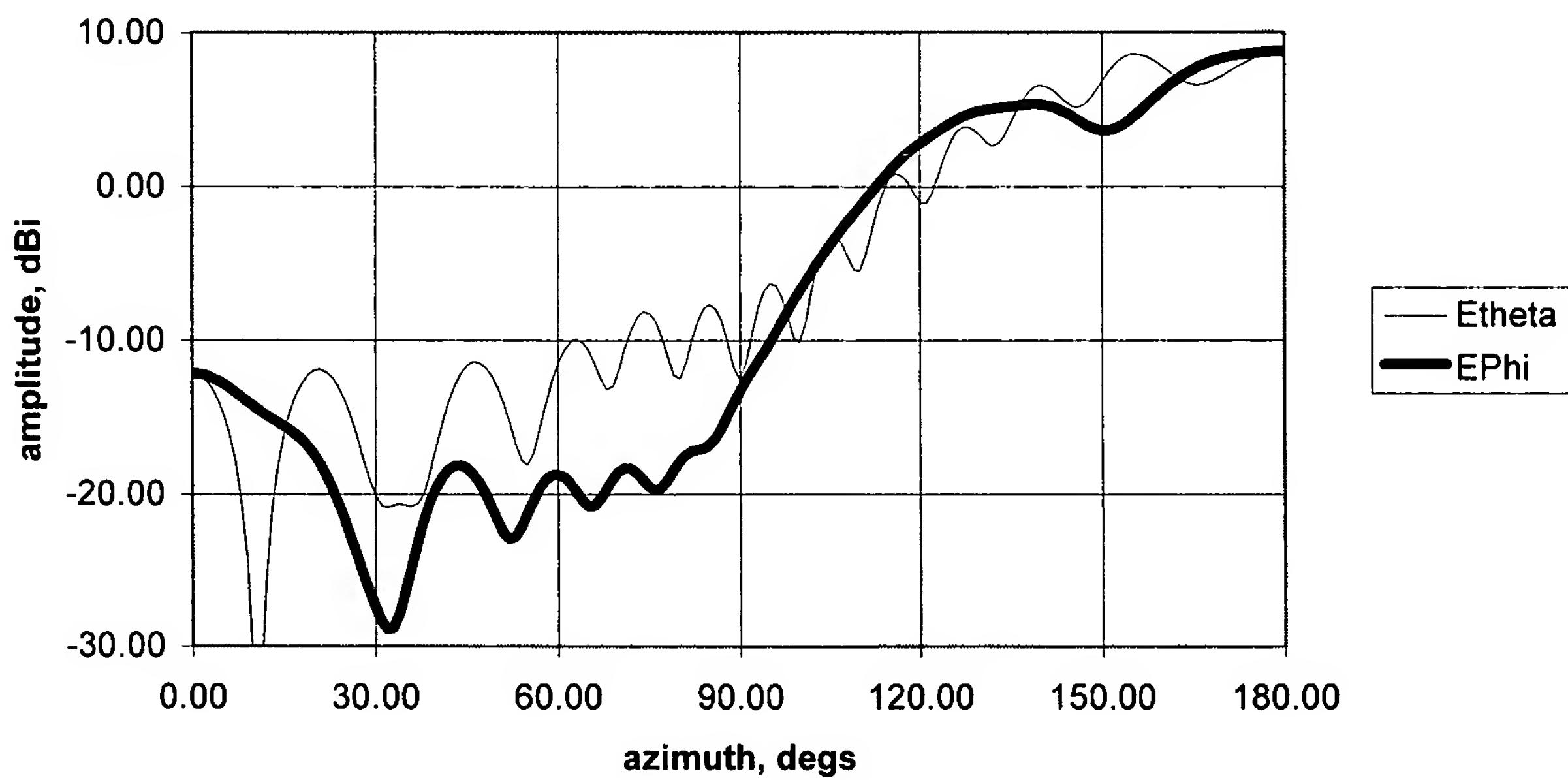


Fig. 1b: E_{theta} and E_{Phi} Amplitude Radiation Patterns from Prior Art Cone Feed (F/D=0.37 typ)



**Fig. 1c: Etheta and Ephi Phase Patterns from Prior Art Cone Feed
(F/D=0.37 typ)**

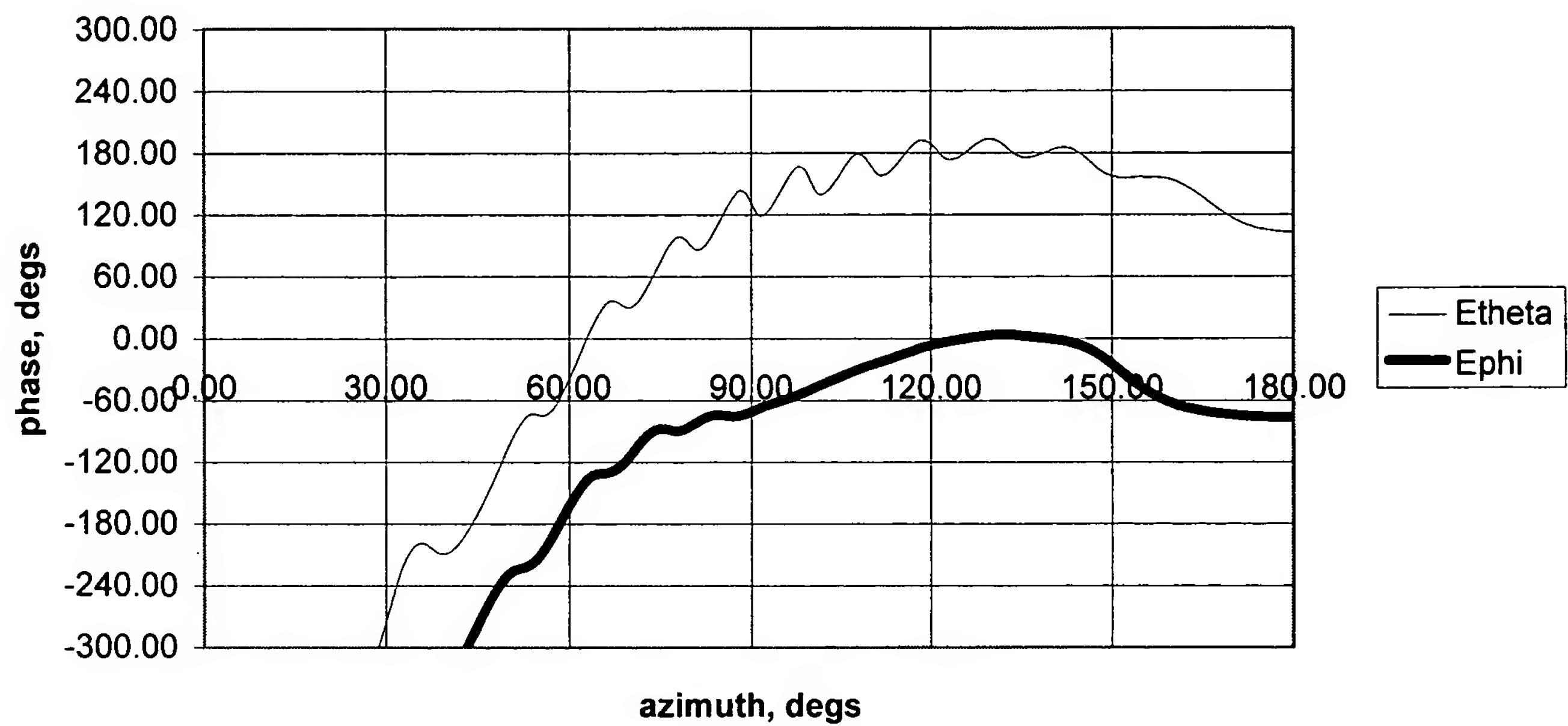


Fig. 2a: Prior Art Cone Design (F/D<0.2) typ.

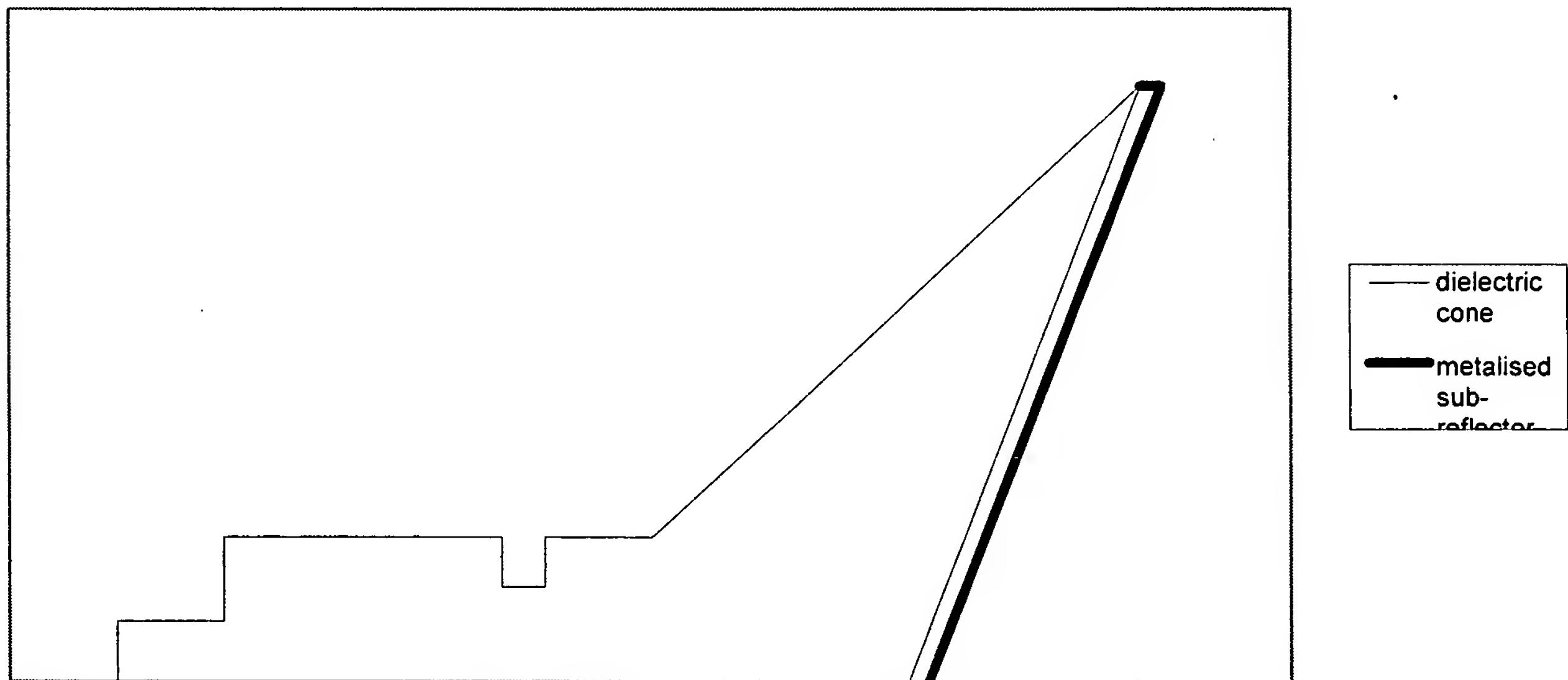


Fig. 2b: Etheta and EPhi Amplitude Radiation Patterns from Prior Art Cone Feed ($F/D < 0.2$ typ)

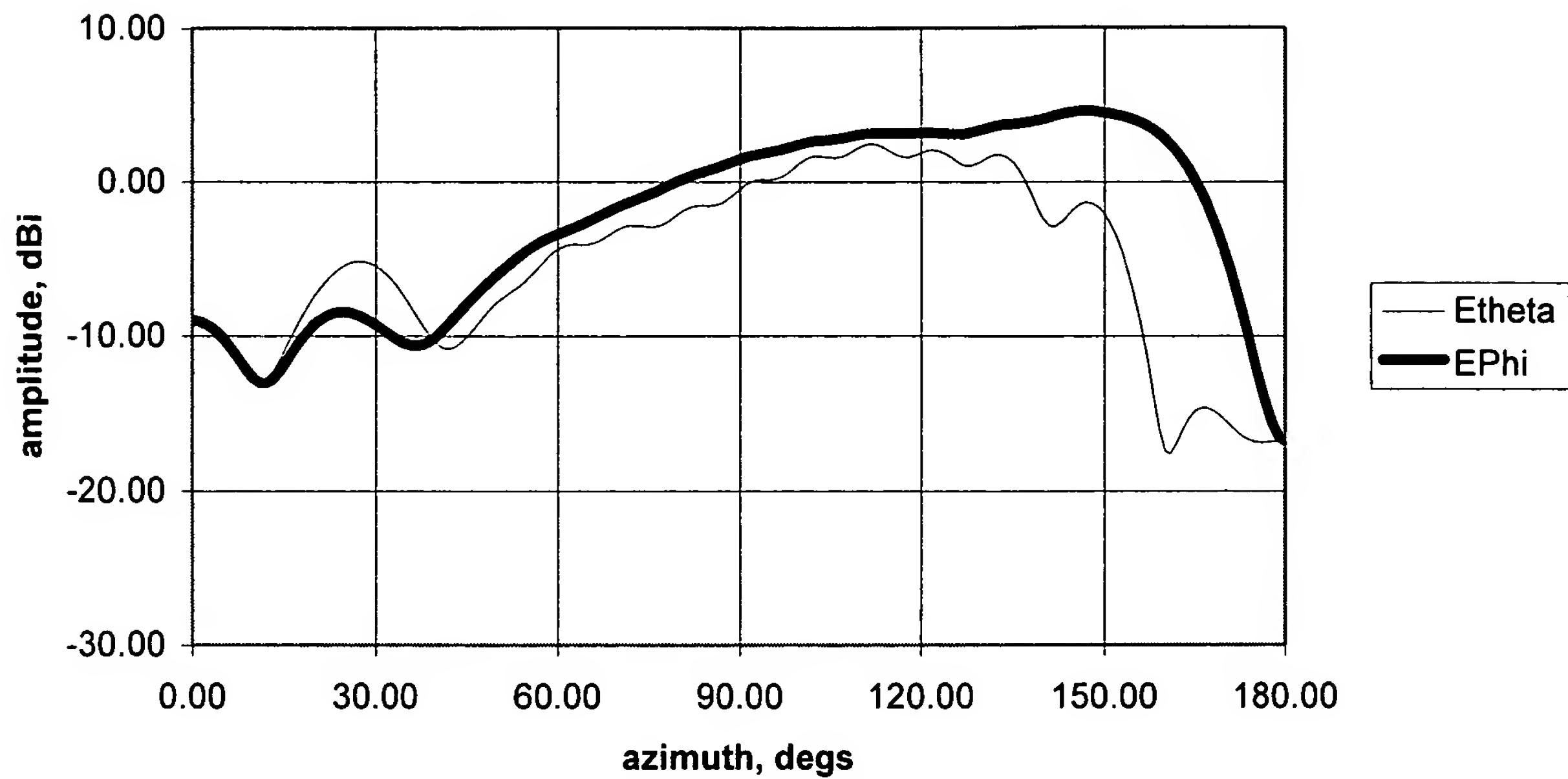


Fig. 2c: Etheta and Ephi Phase Patterns from Prior Art Cone Feed ($F/D < 0.2$ typ)

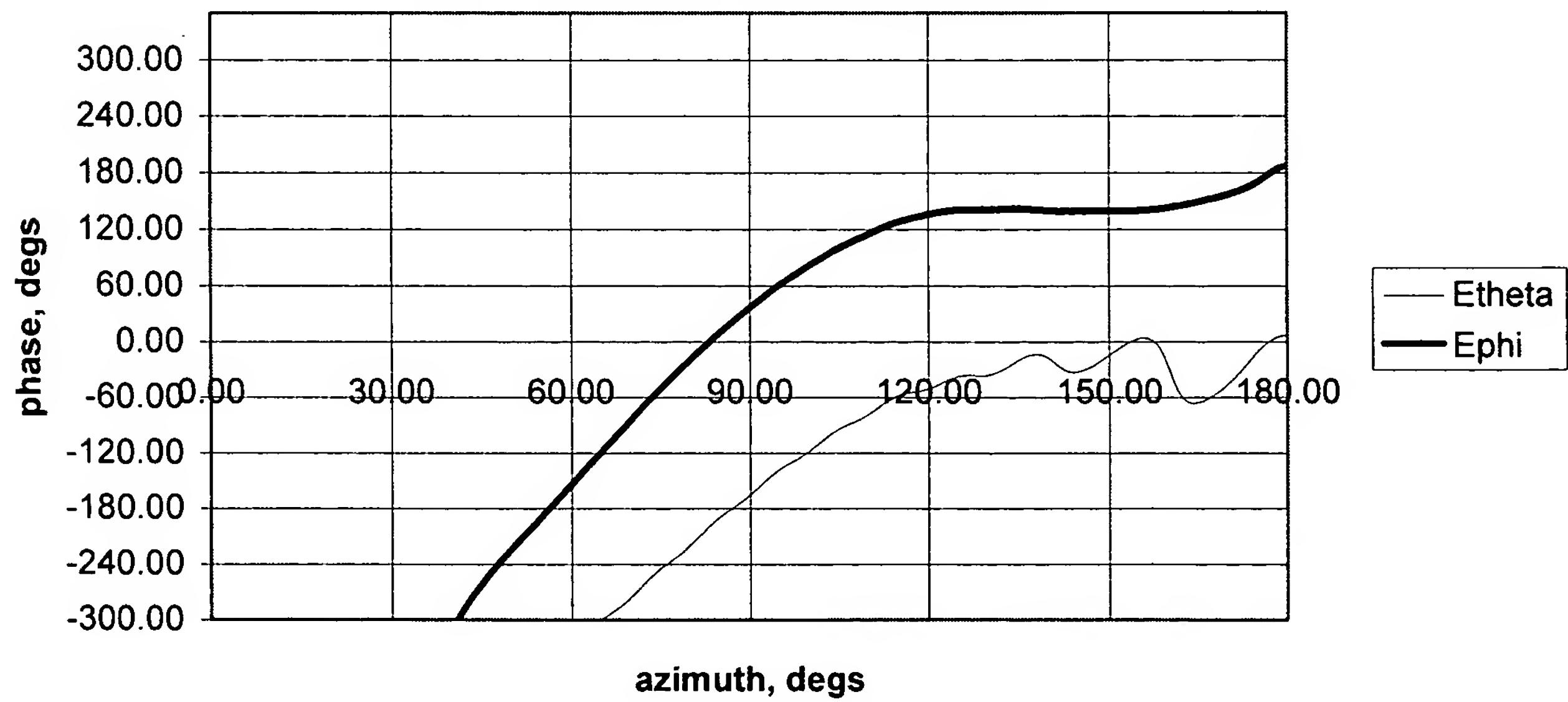


Fig. 3a: Prior Art Corrugated Cone Design (F/D<0.2) typ.

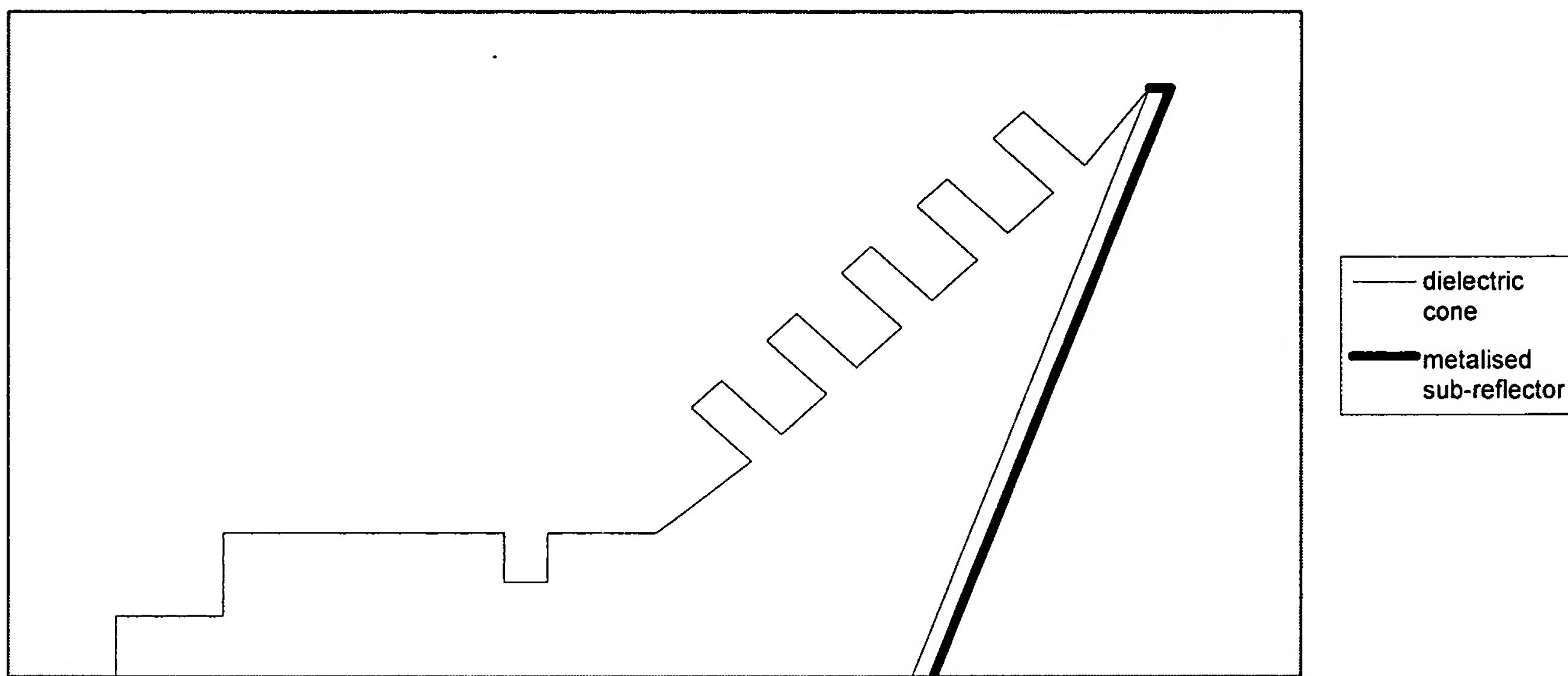


Fig. 3b: E θ and E ϕ Amplitude Radiation Patterns from Prior Art Corrugated Cone Feed (F/D< 0.2 typ)

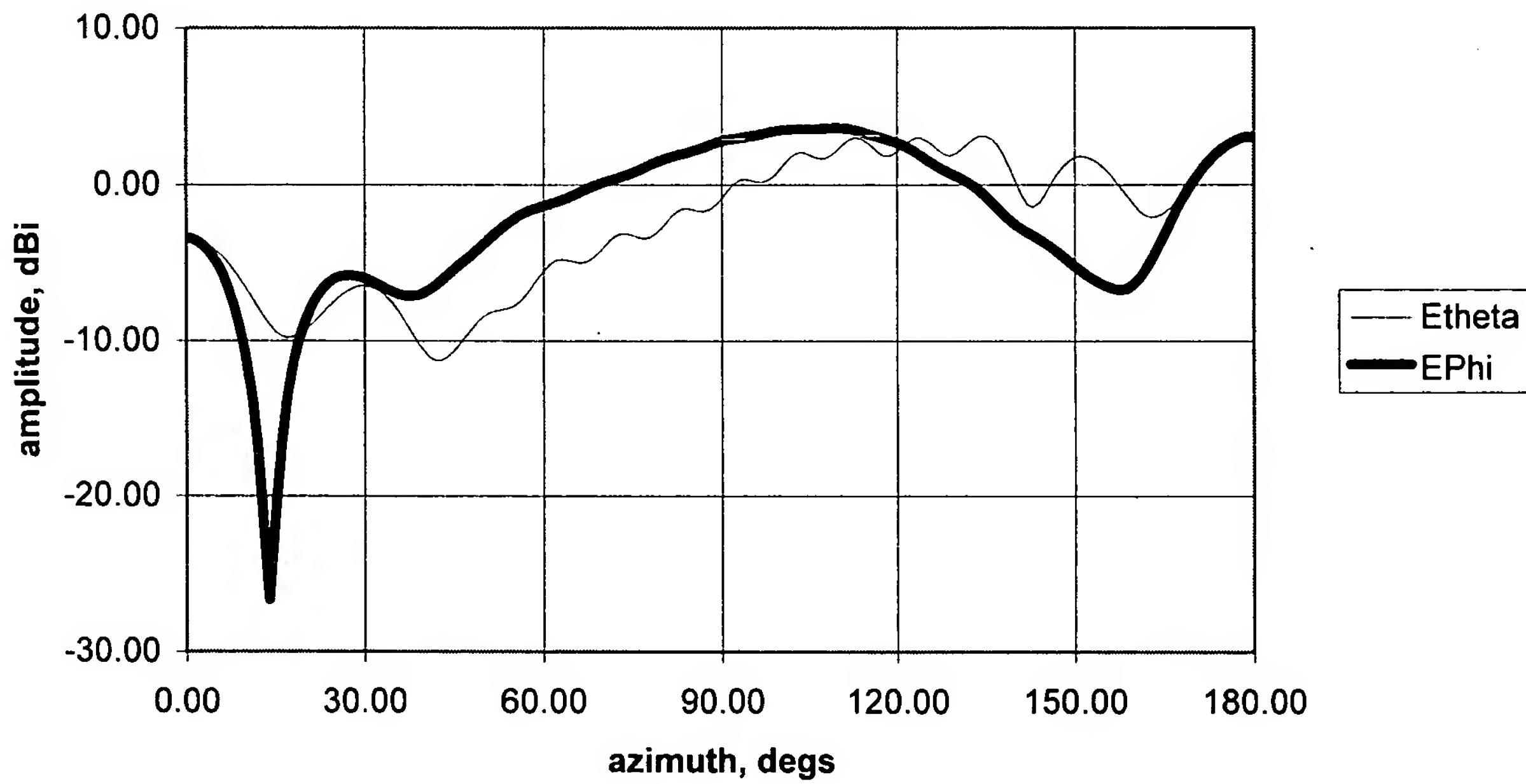
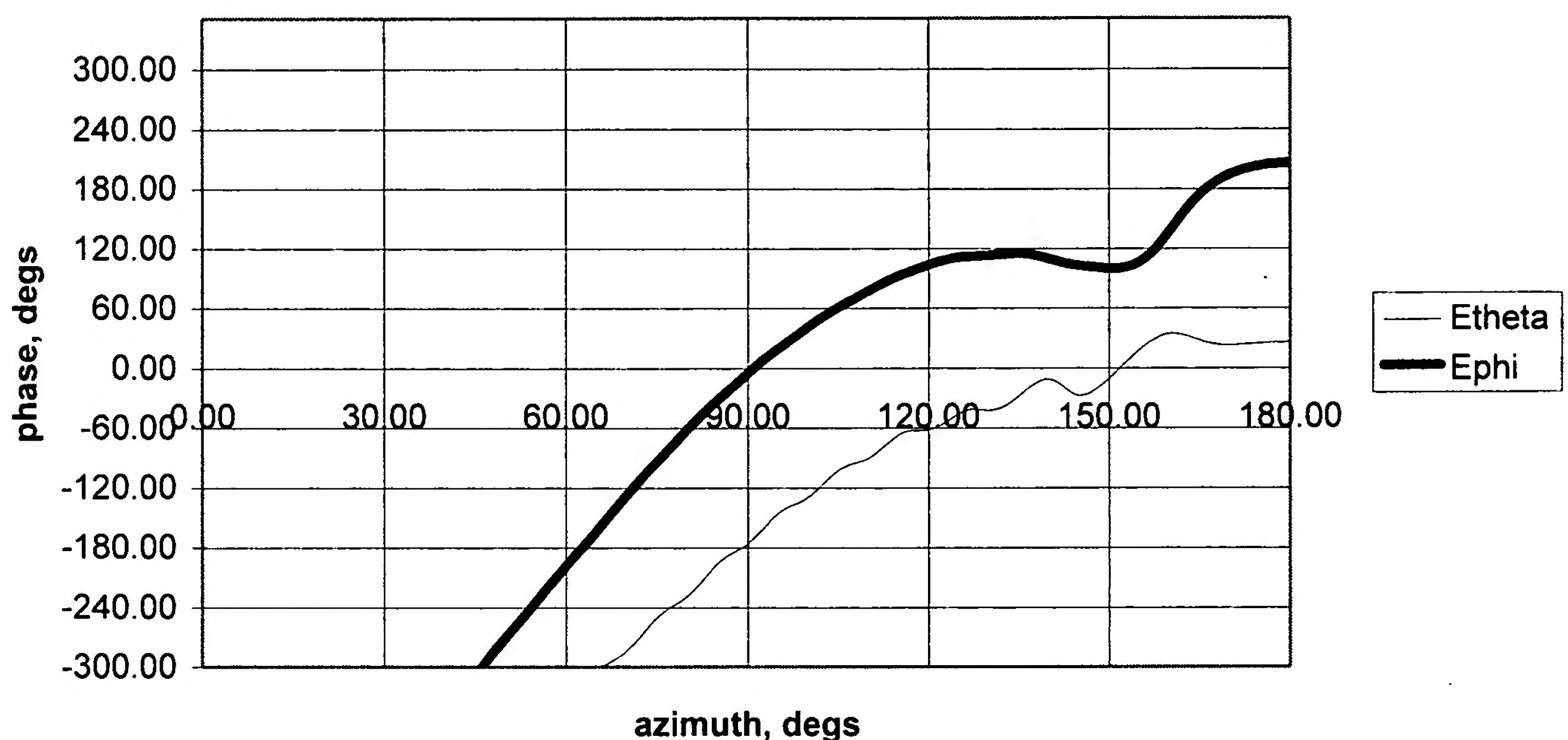


Fig. 3c: Etheta and Ephi Phase Patterns from Prior Art Corrugated Cone Feed ($F/D < 0.2$ typ)



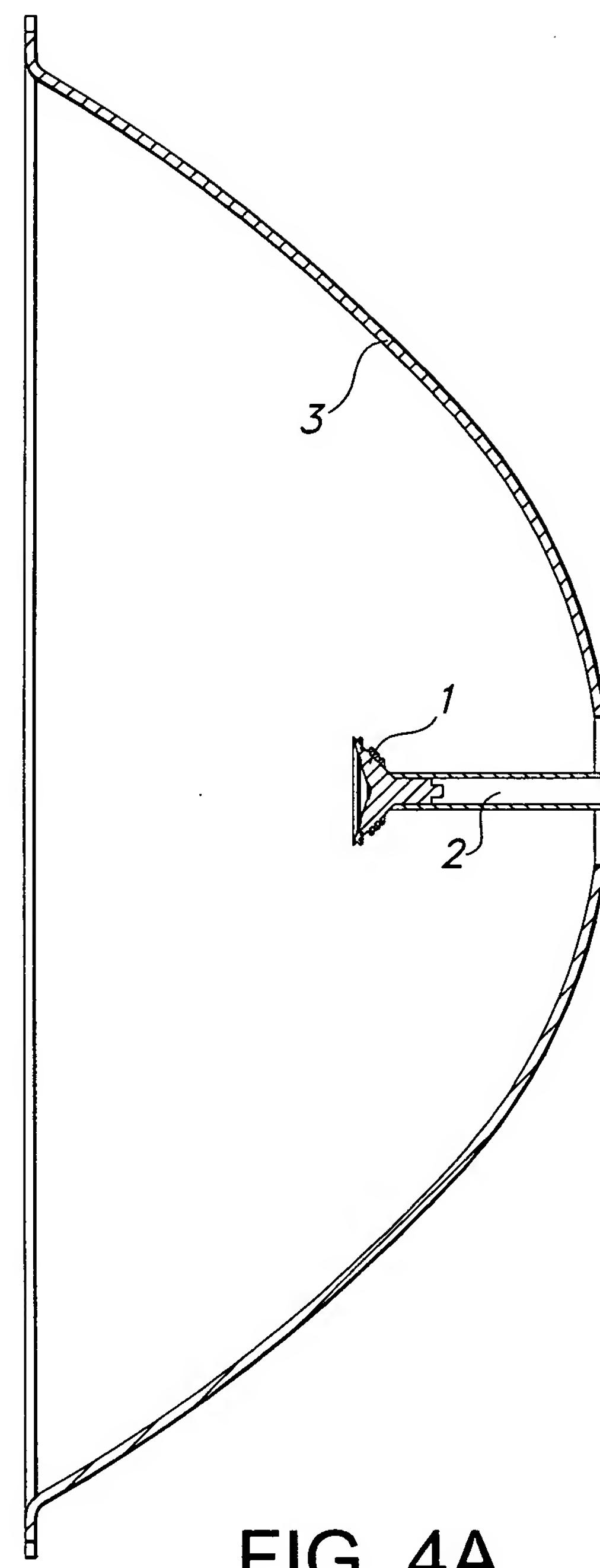


FIG. 4A

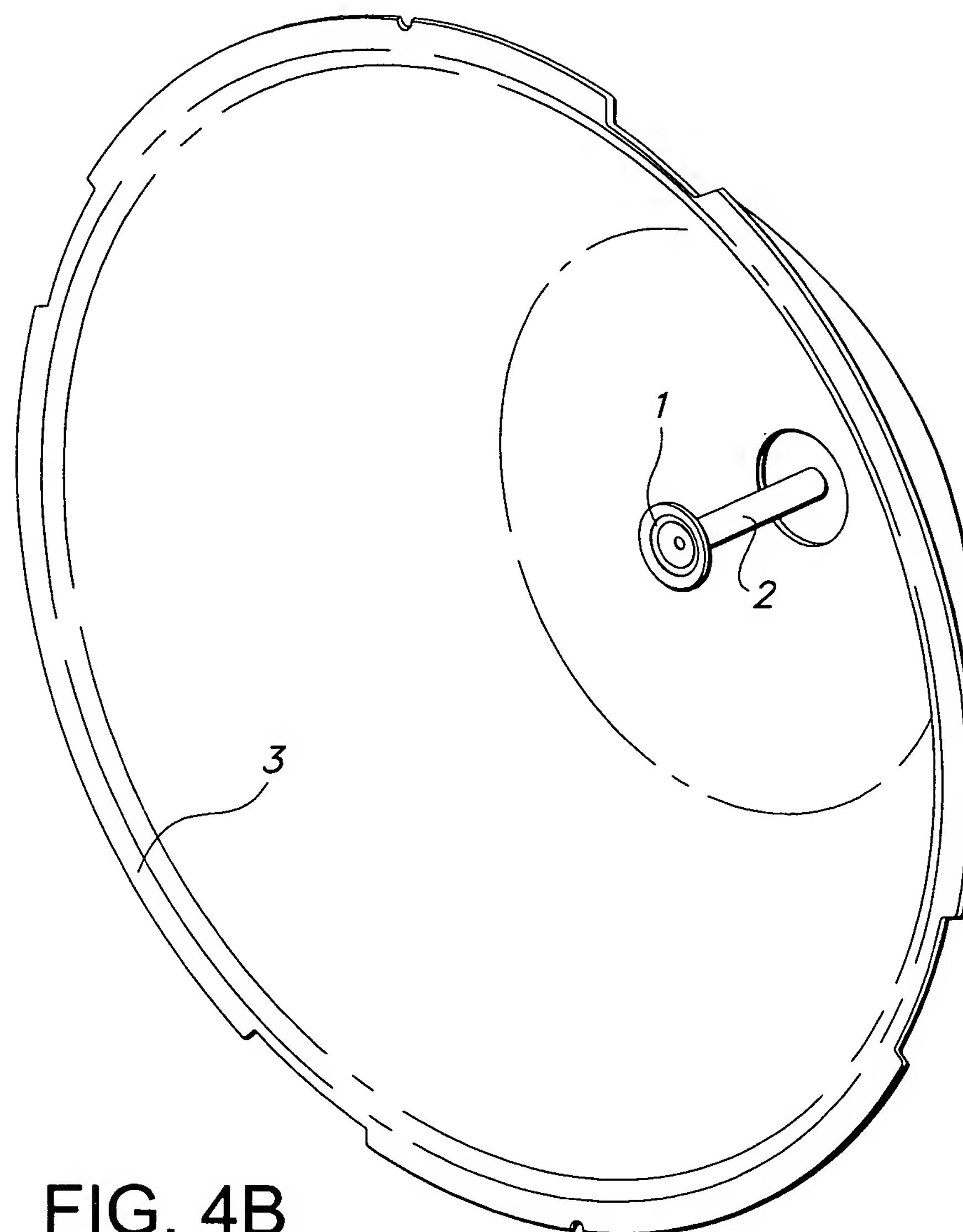


FIG. 4B

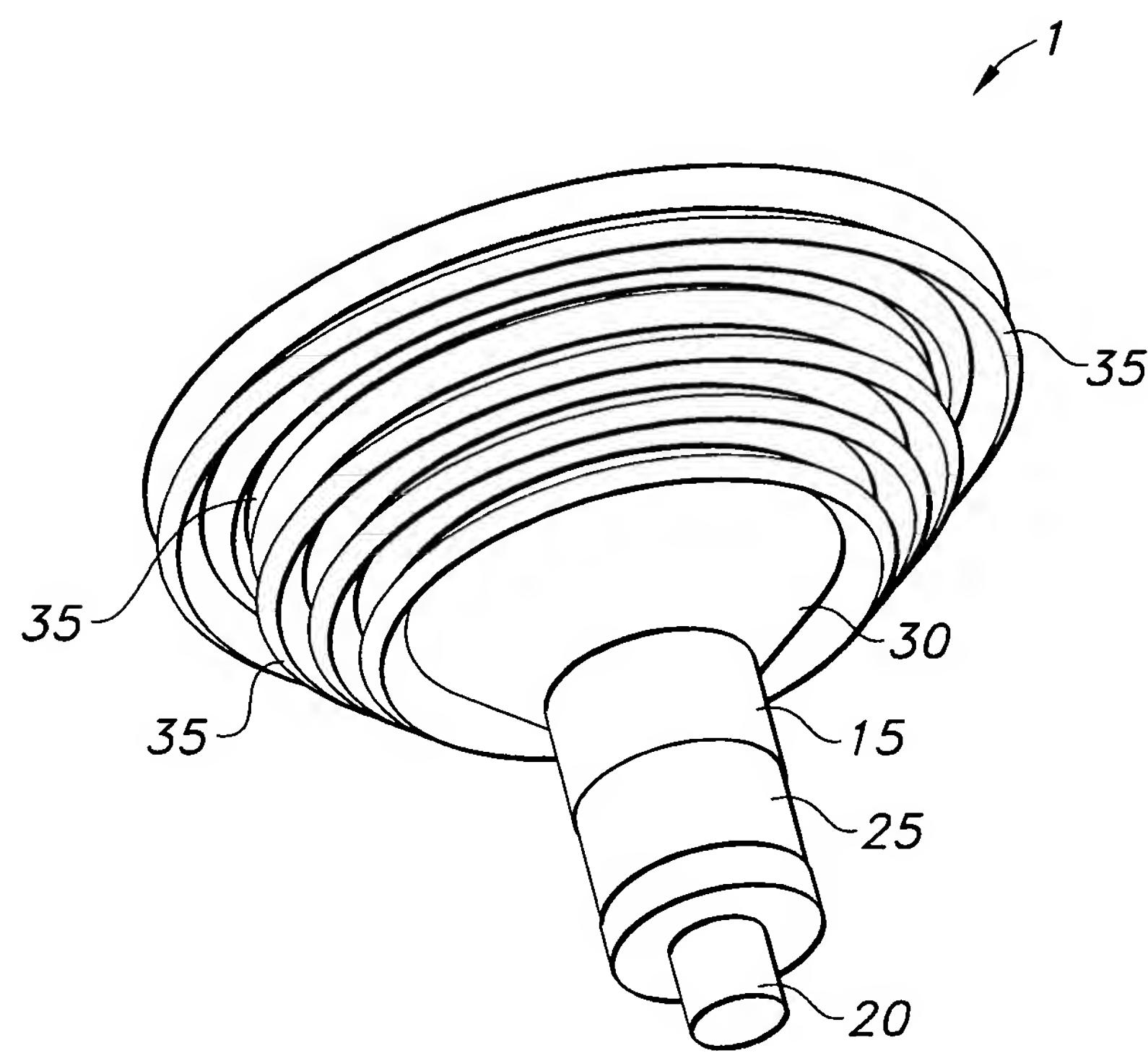


FIG. 5A

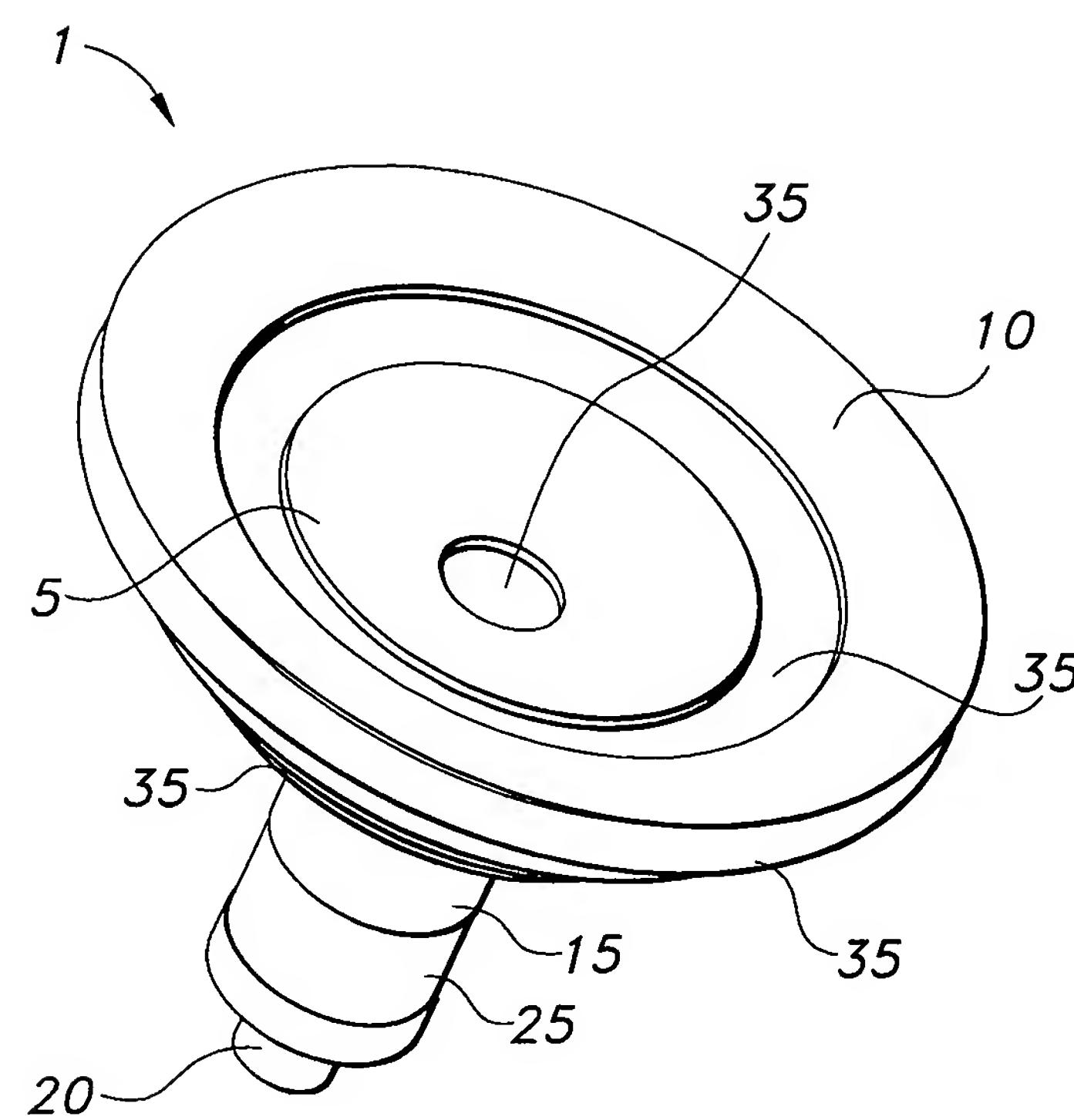
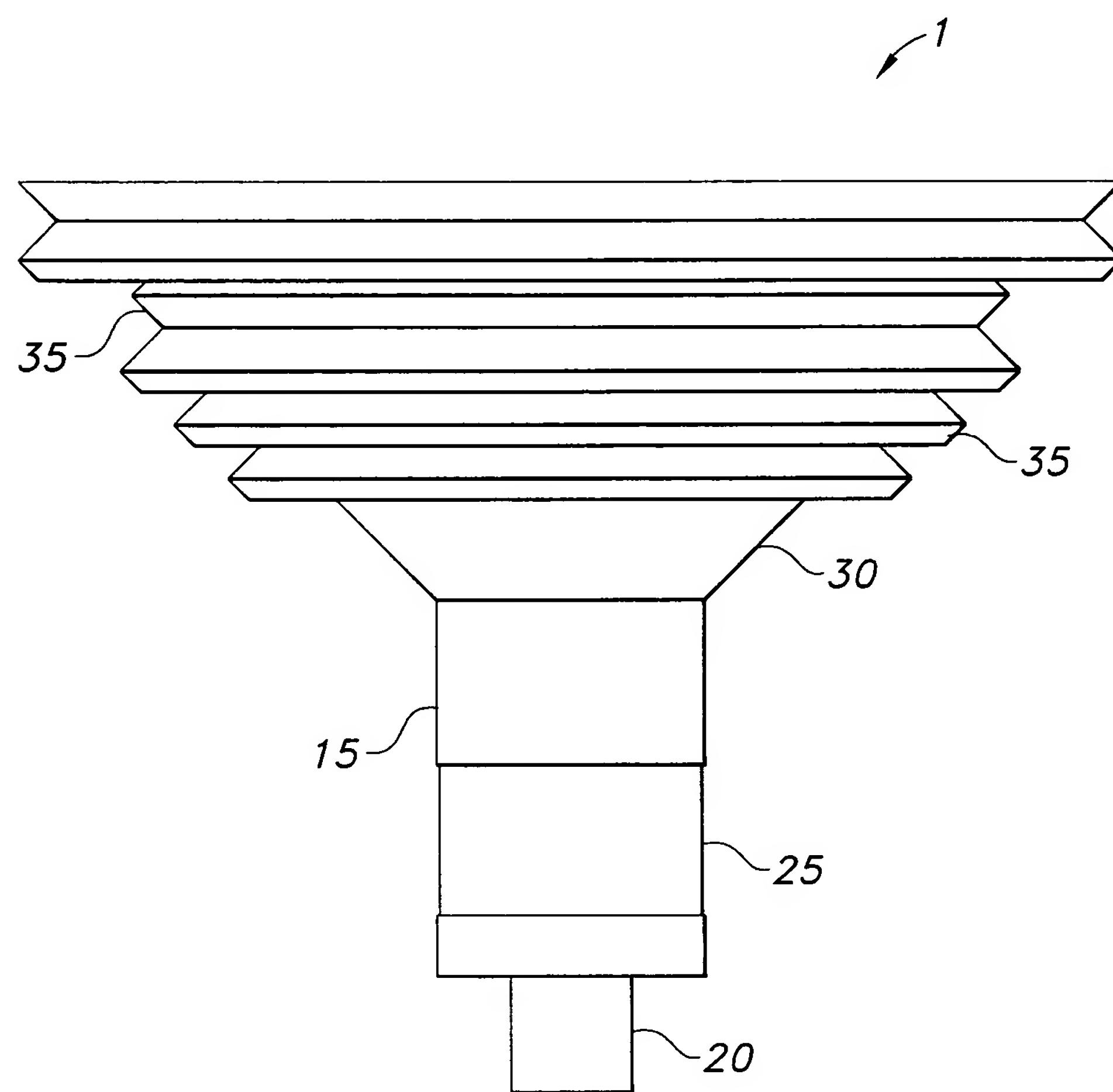


FIG. 5B



Replacement Sheet

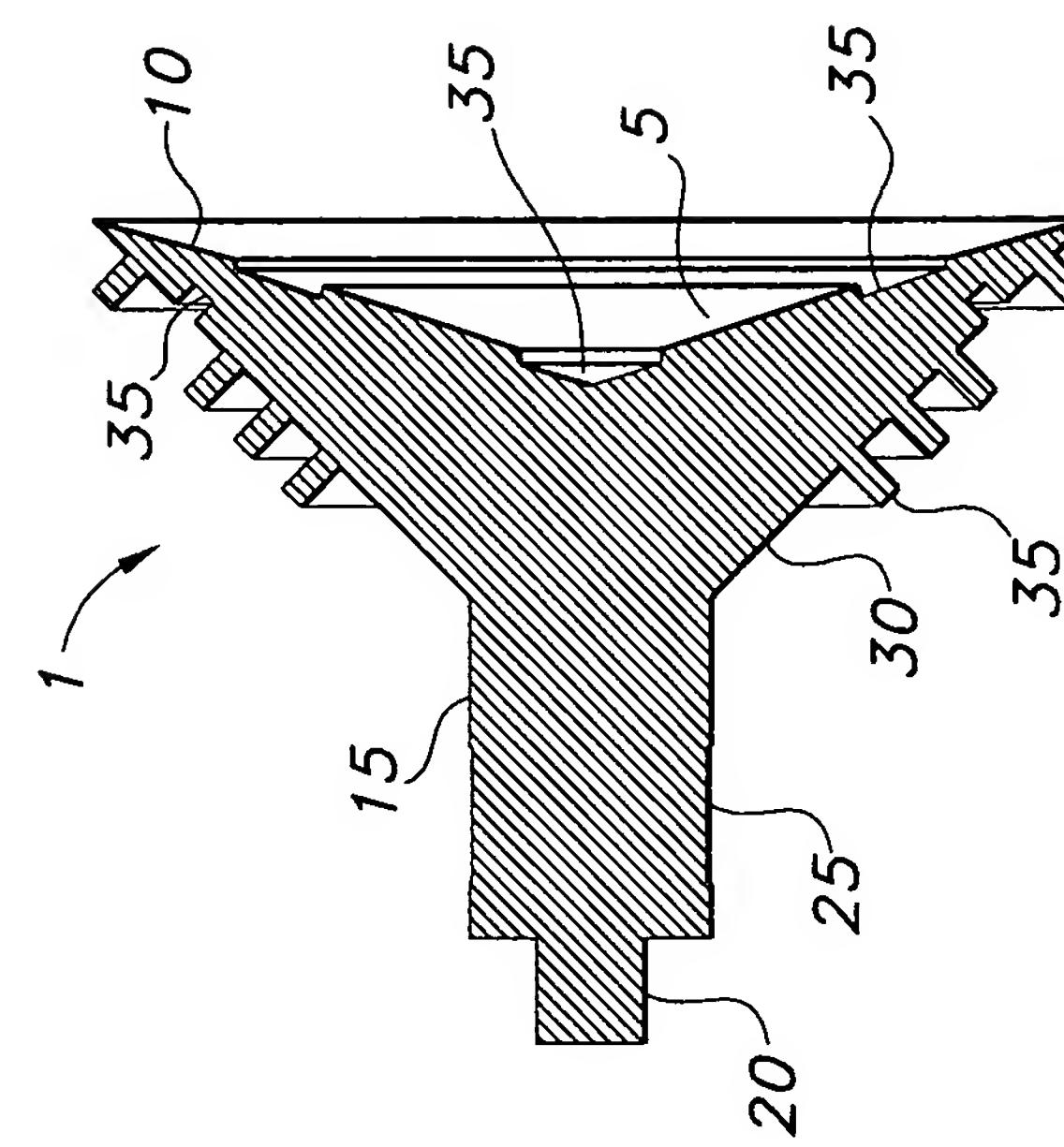


FIG. 5E

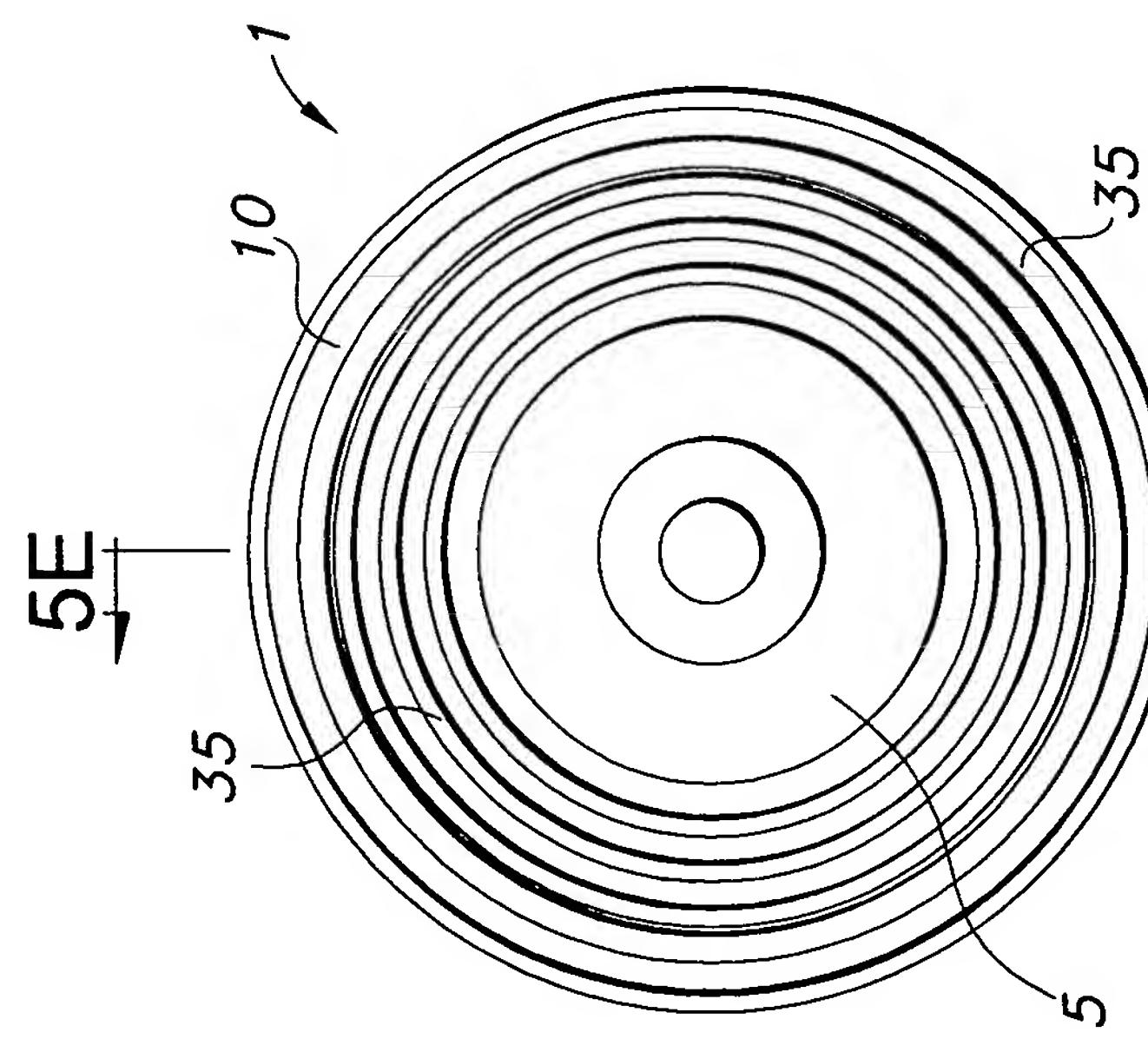


FIG. 5D

Fig. 6a: 22GHz 1' Measured Radiation Pattern of 1st Embodiment: E-plane vs ETSI and FCC specs

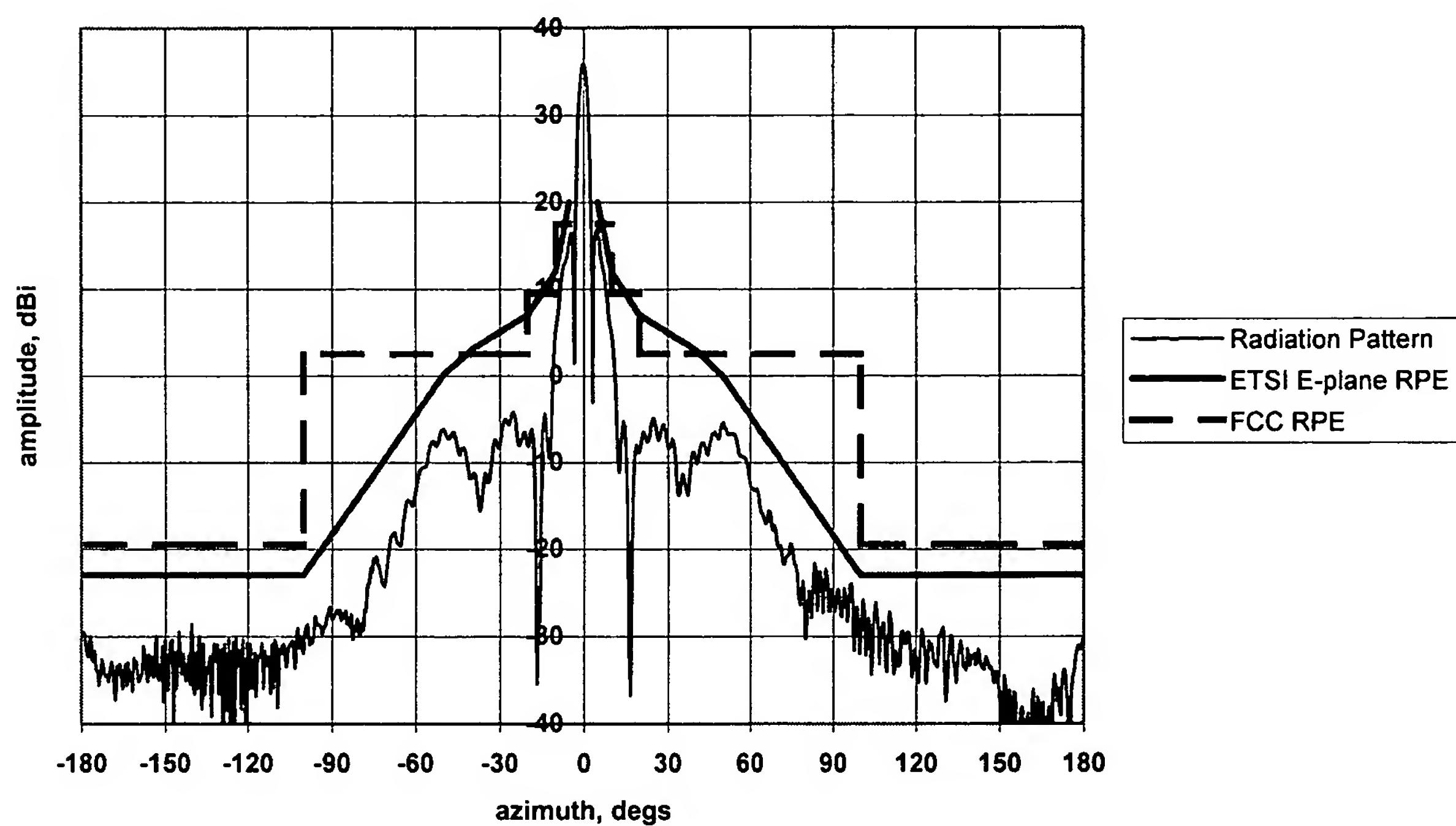


Fig. 6b: 22GHz 1' Measured Radiation Pattern of 1st Embodiment: H-plane vs ETSI and FCC specs

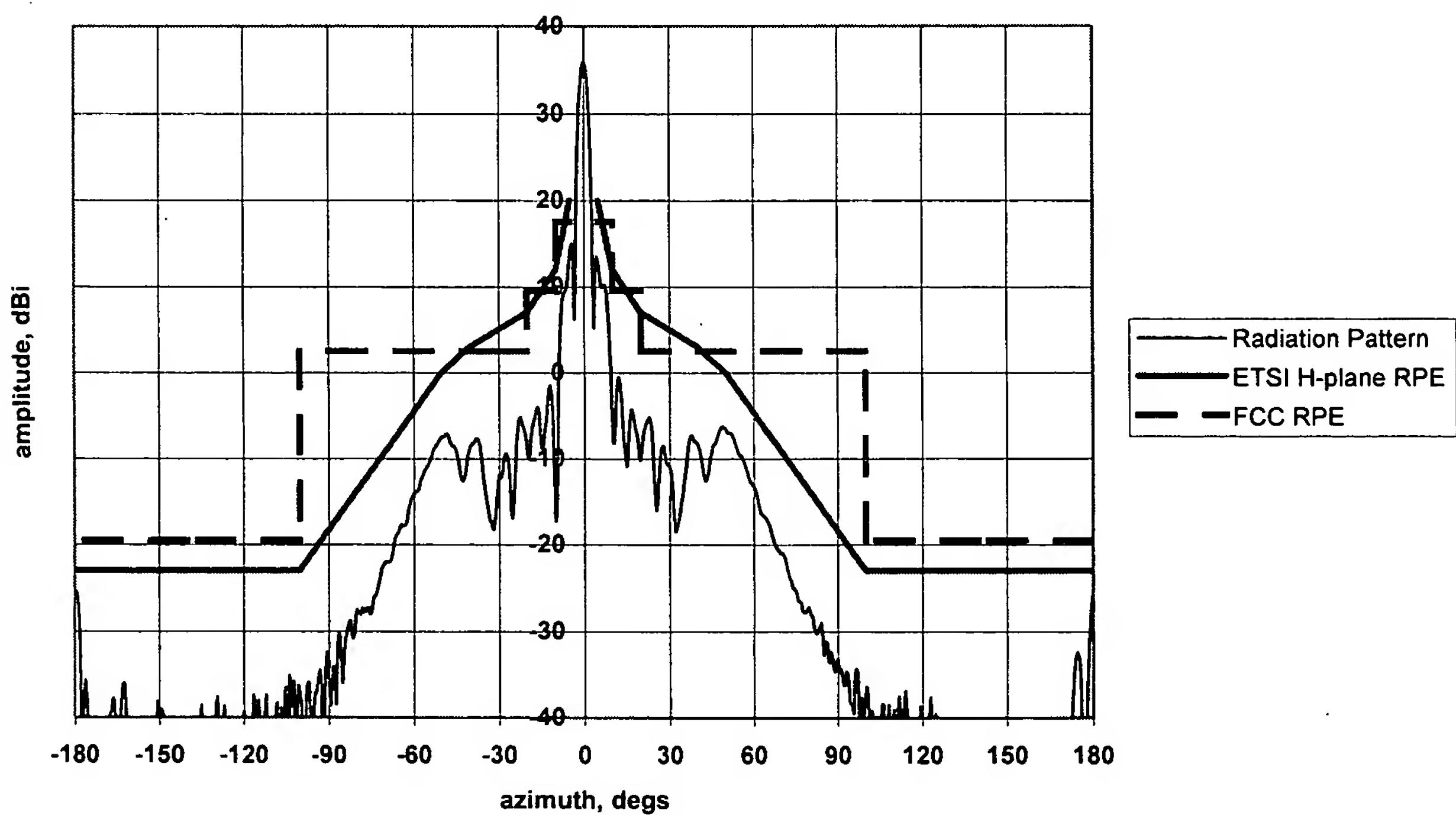
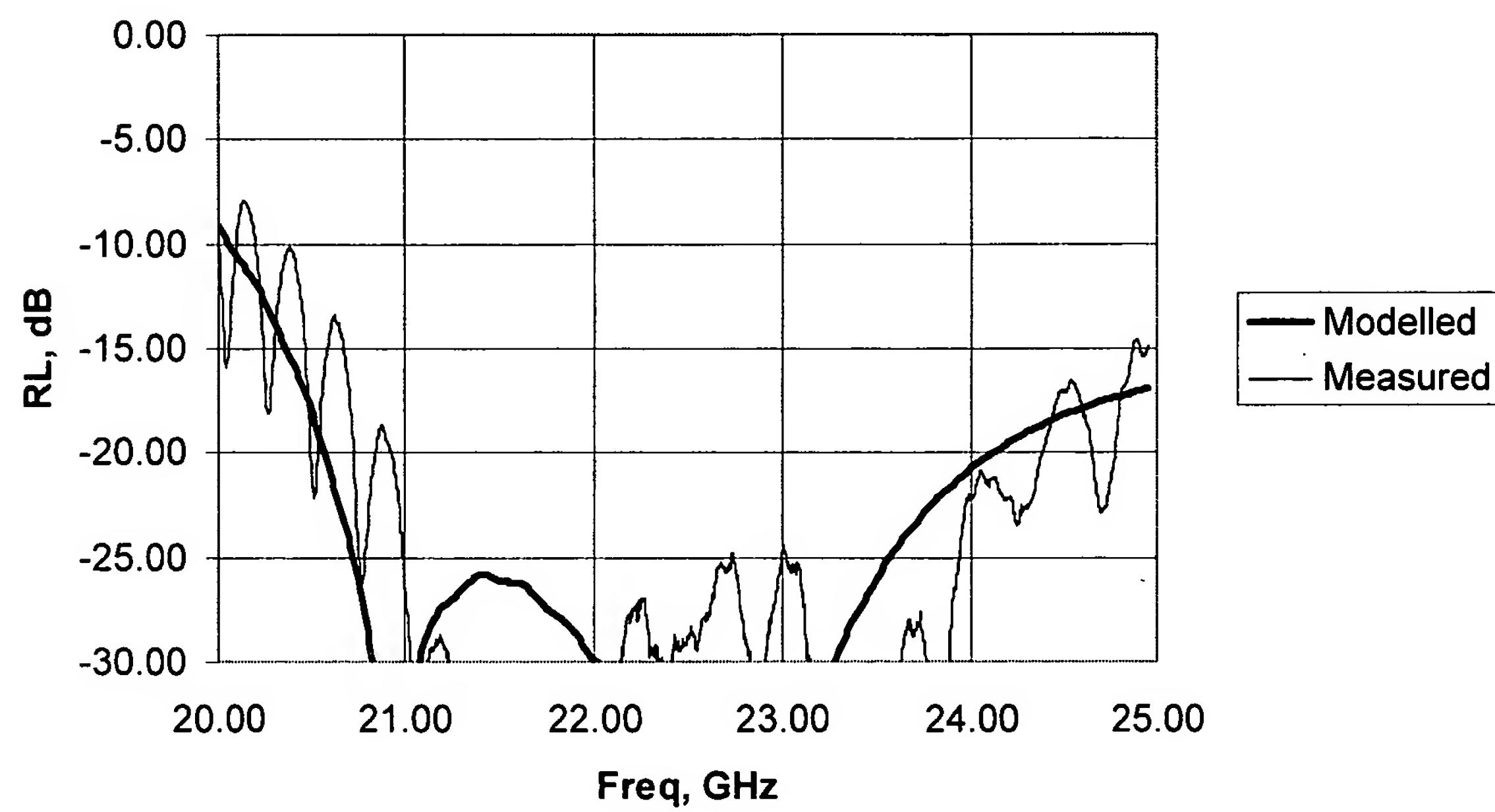


Fig. 7 of 1st Embodiment: Measured vs Modelled Return Loss of Cone Feed



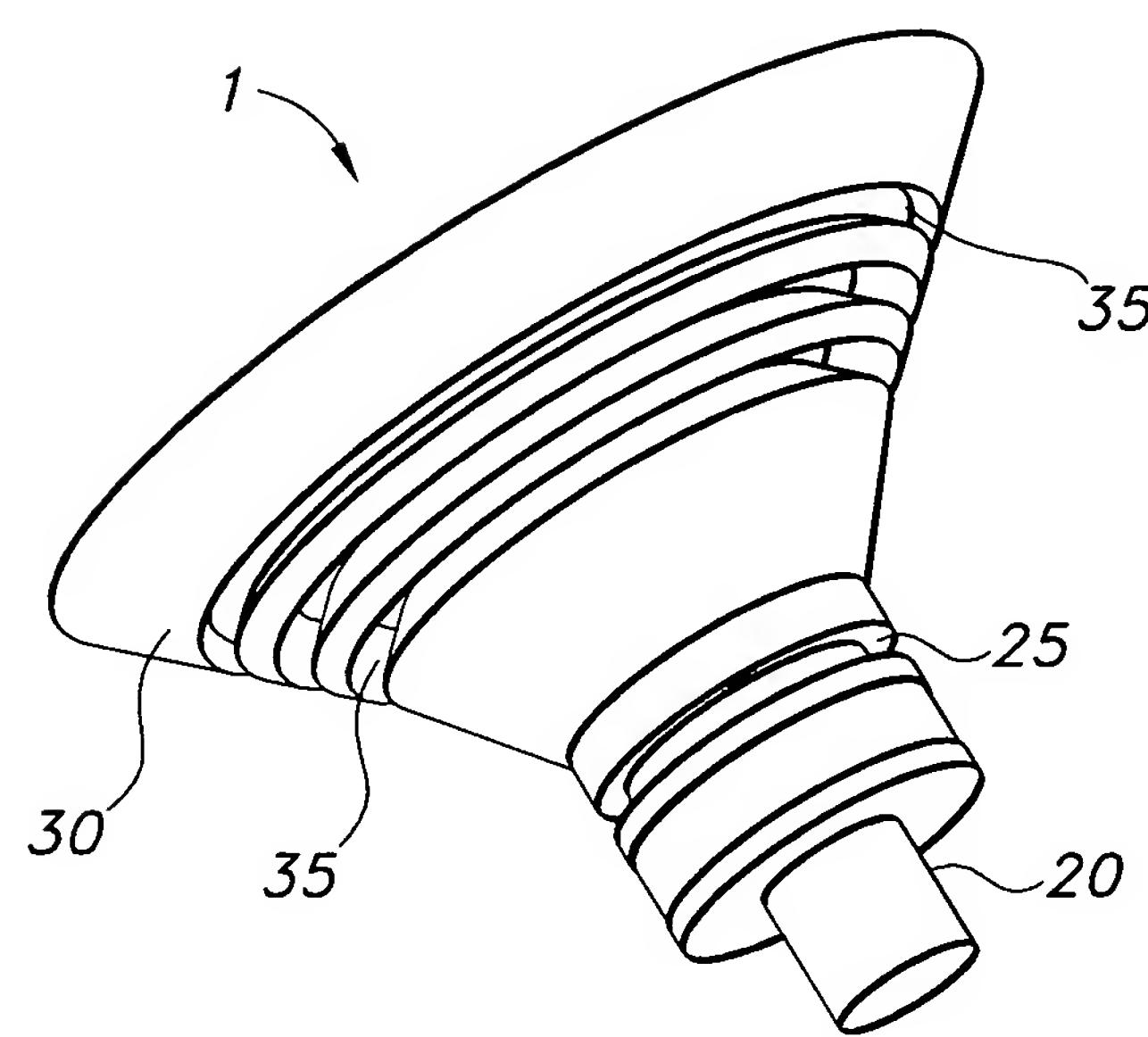


FIG. 8A

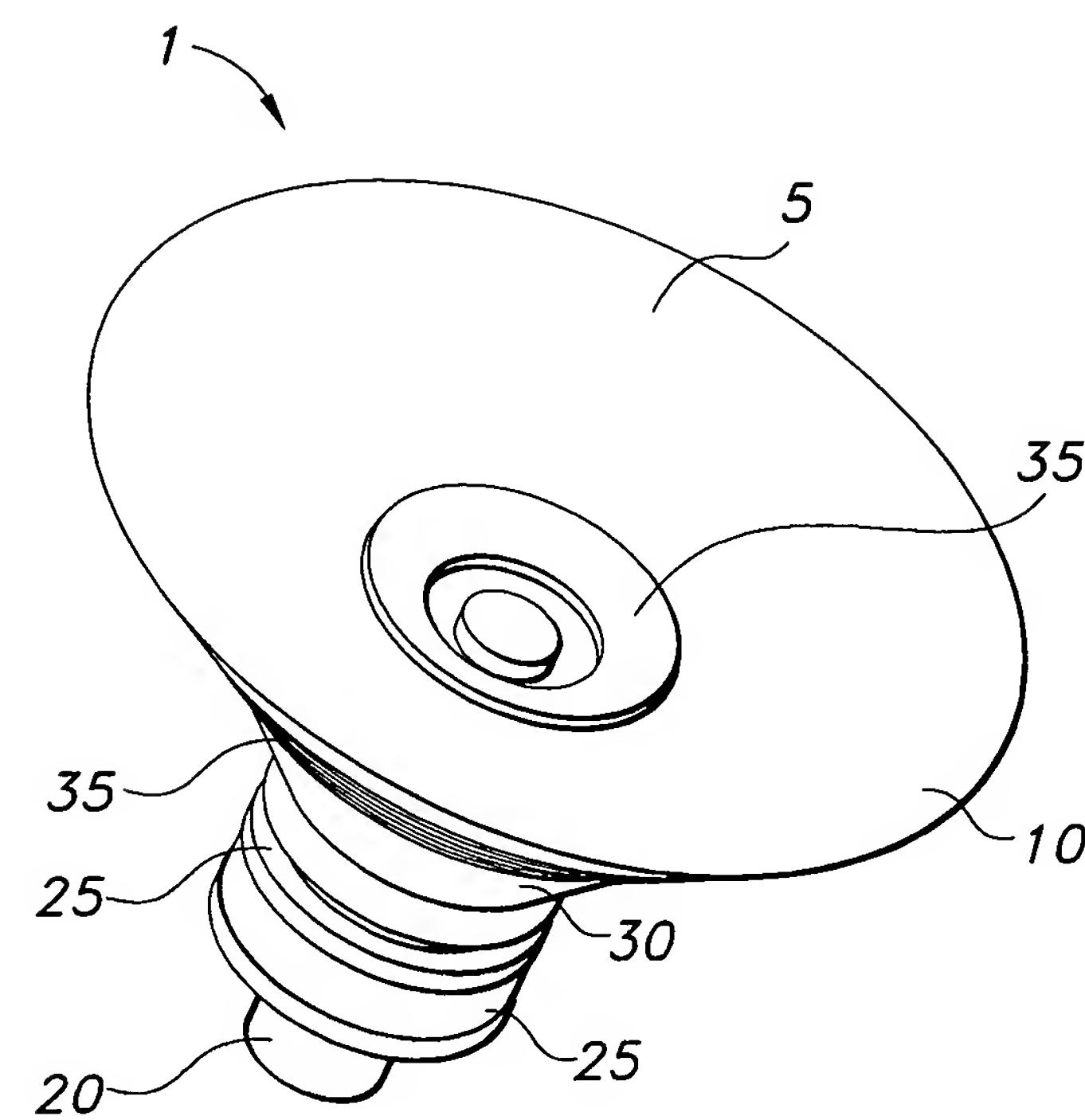


FIG. 8B

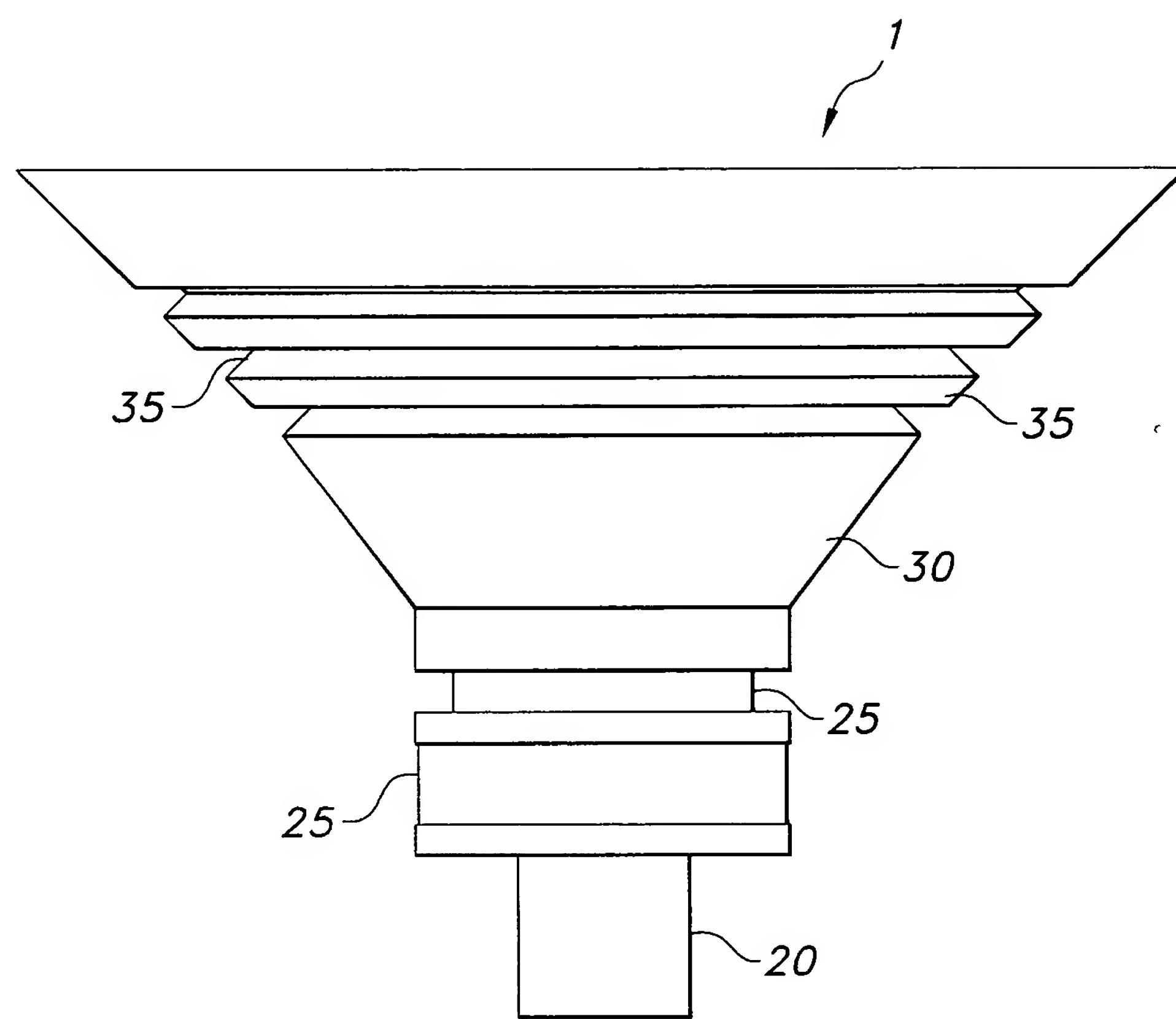


FIG. 8C

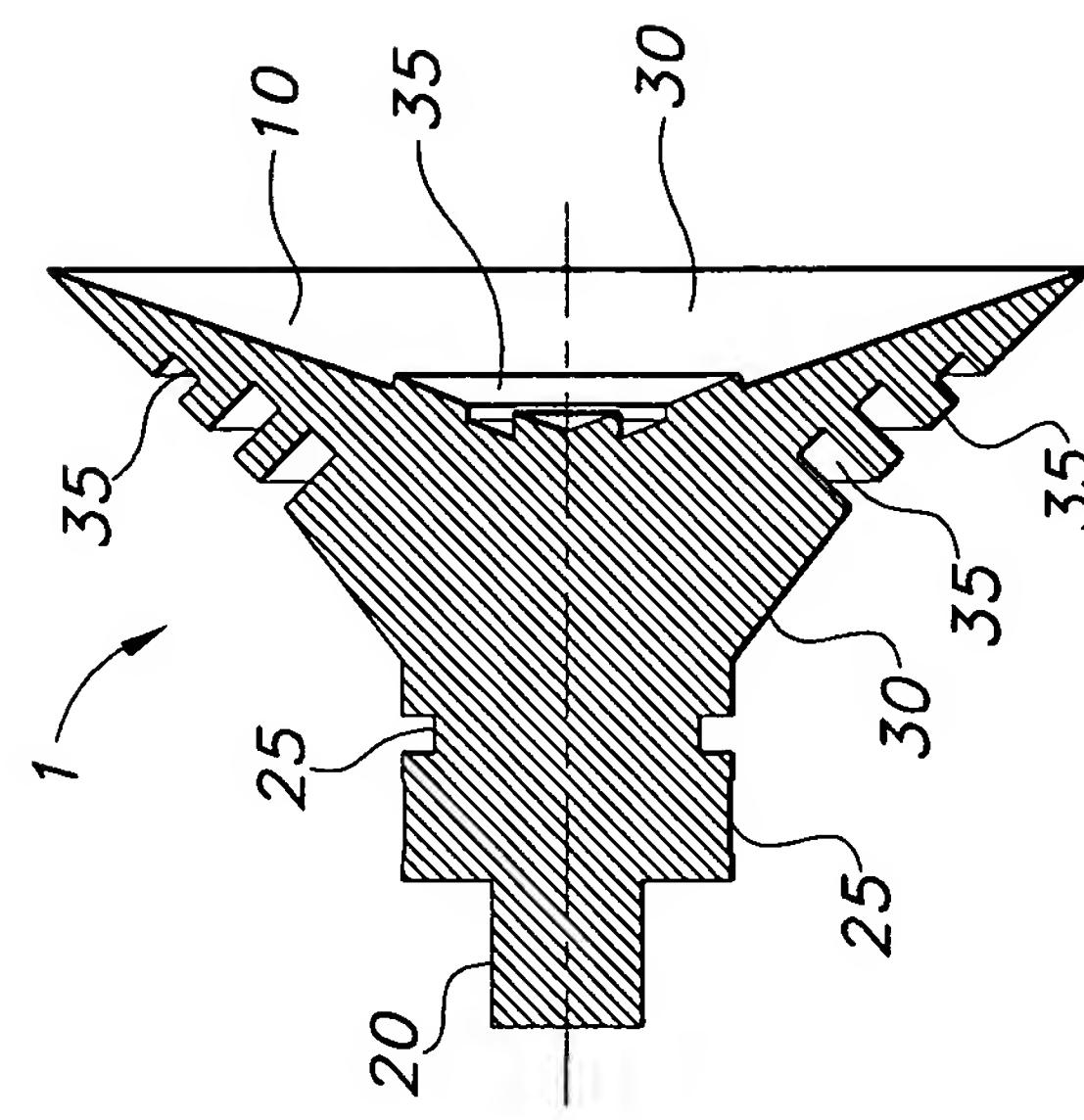


FIG. 8E

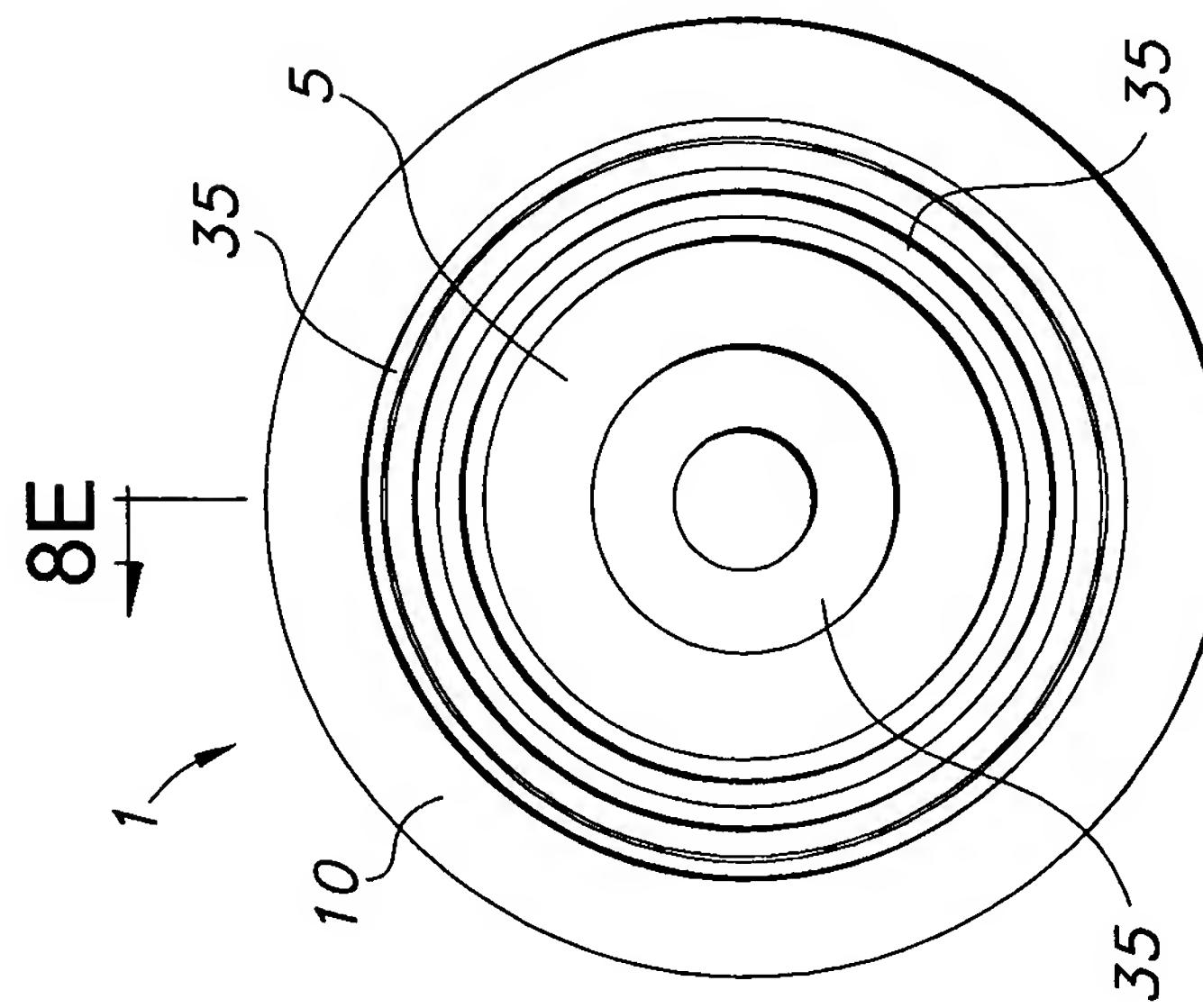


FIG. 8D

Fig. 9a: 22GHz 1' Measured Radiation Pattern of 2nd Embodiment: E-plane vs ETSI and FCC specs

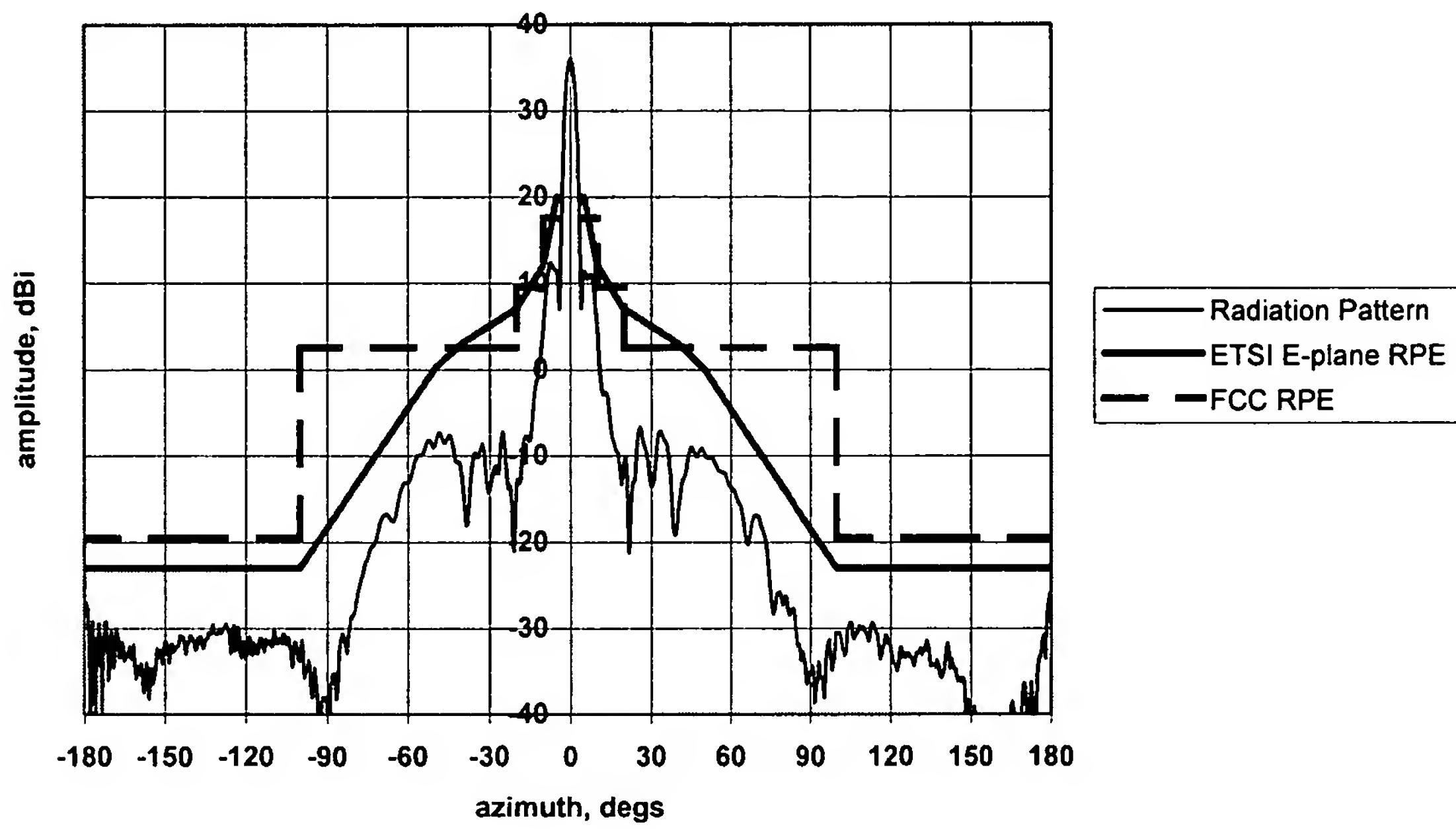


Fig. 9b: 22GHz 1' Measured Radiation Pattern of 2nd Embodiment: H-plane vs ETSI and FCC specs

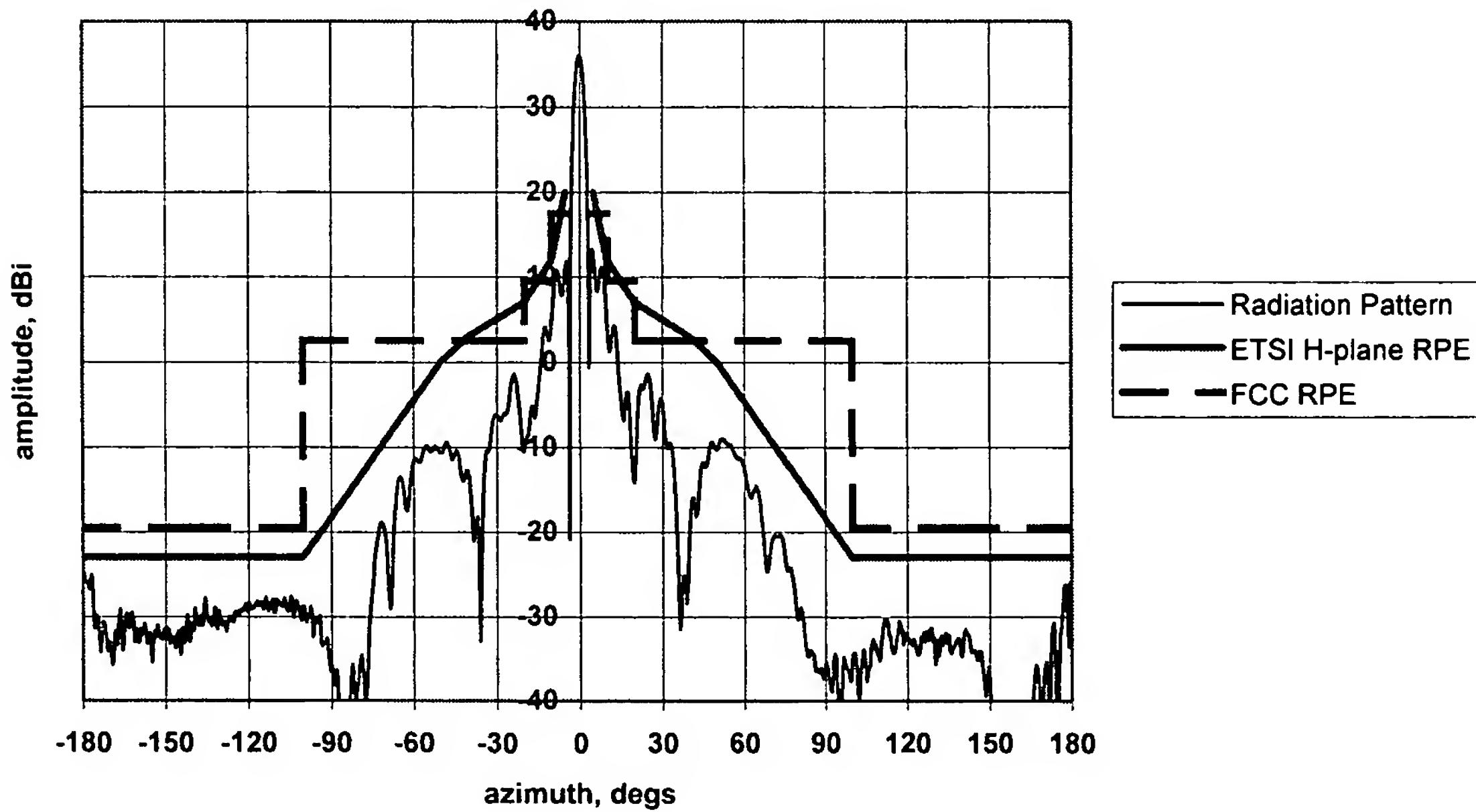


Fig. 10a: 3rd Embodiment ($F/D < 0.2$) typ.

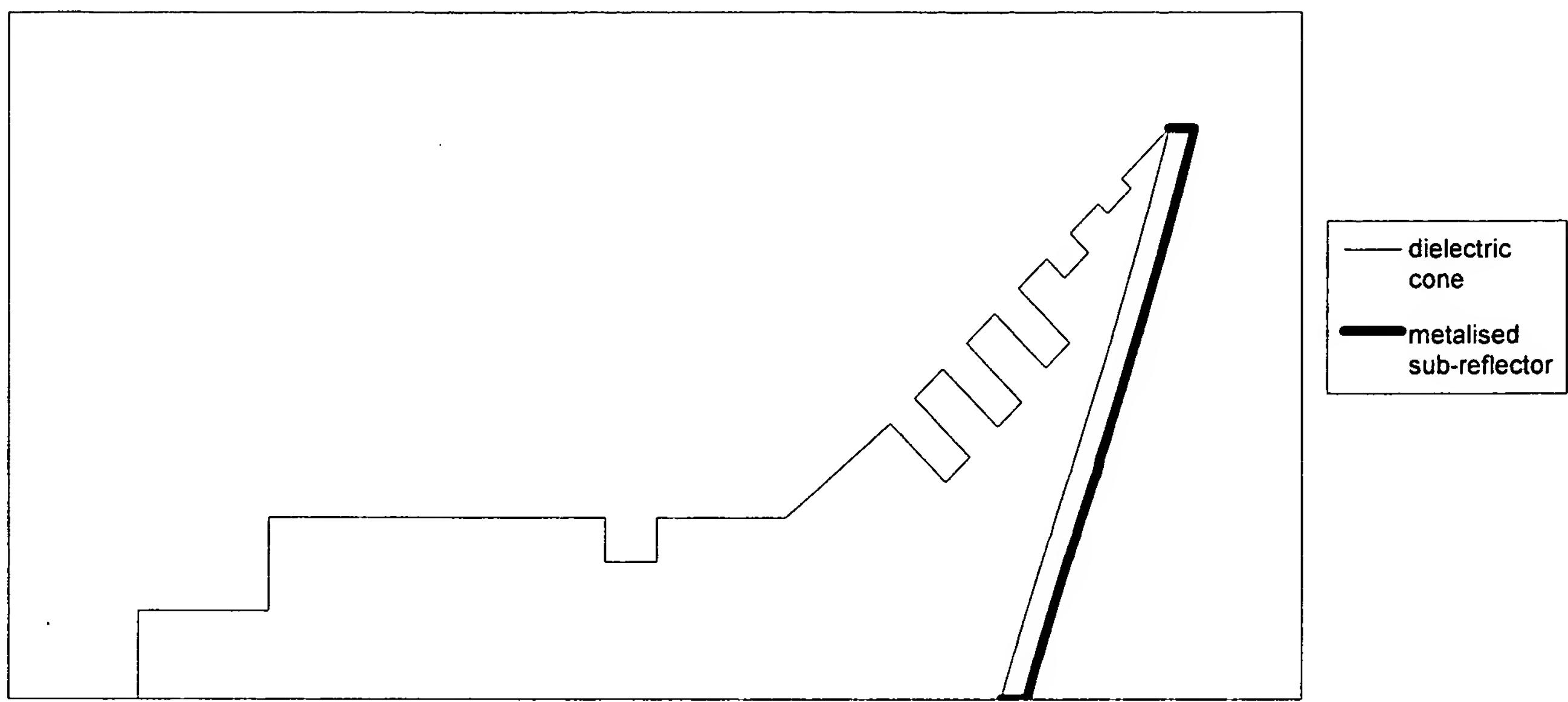


Fig. 10b: E θ and E ϕ Amplitude Radiation Patterns

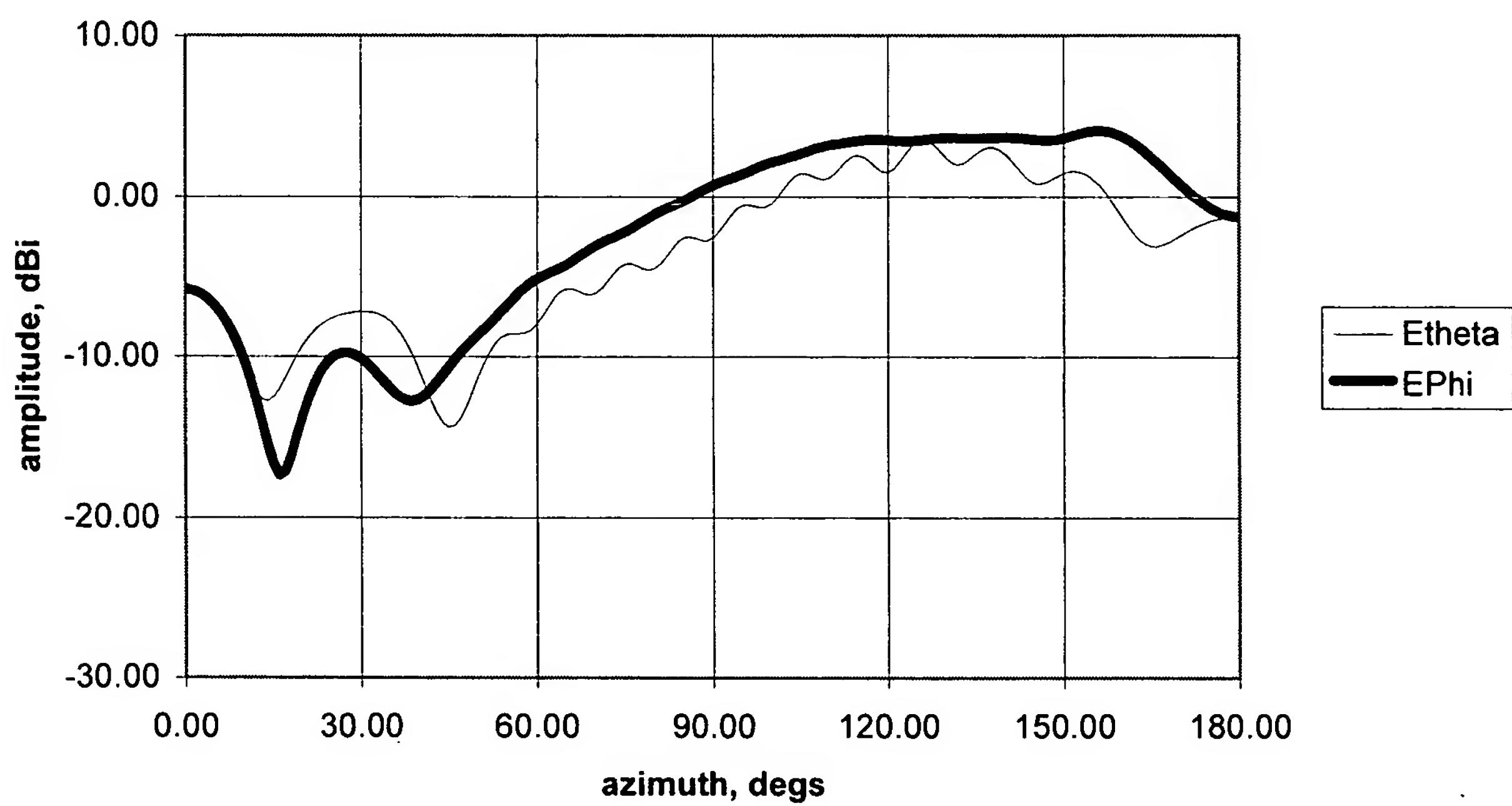


Fig. 10c: Etheta and Ephi Phase Patterns (F/D<0.2 typ)

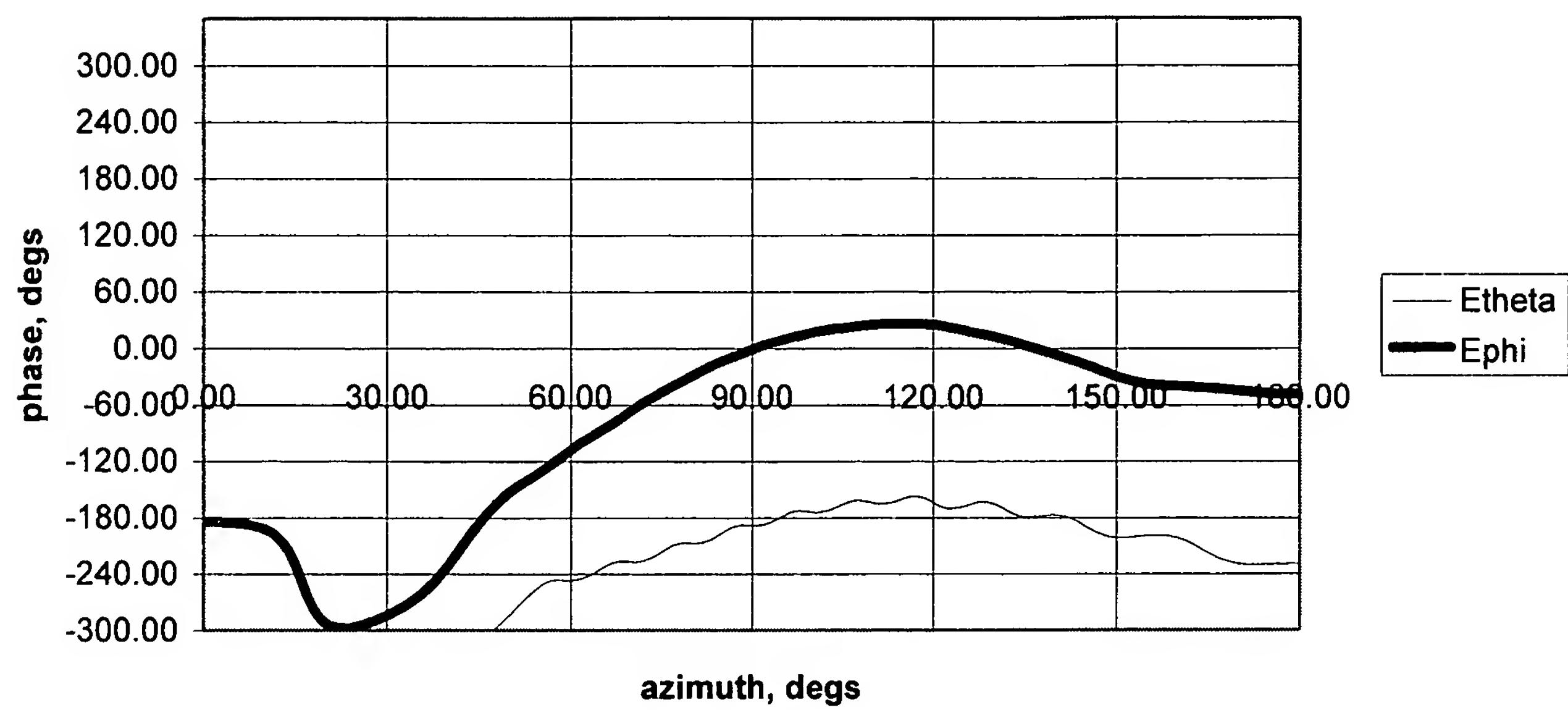


Fig. 11a: 4th Embodiment (F/D<0.2) typ.

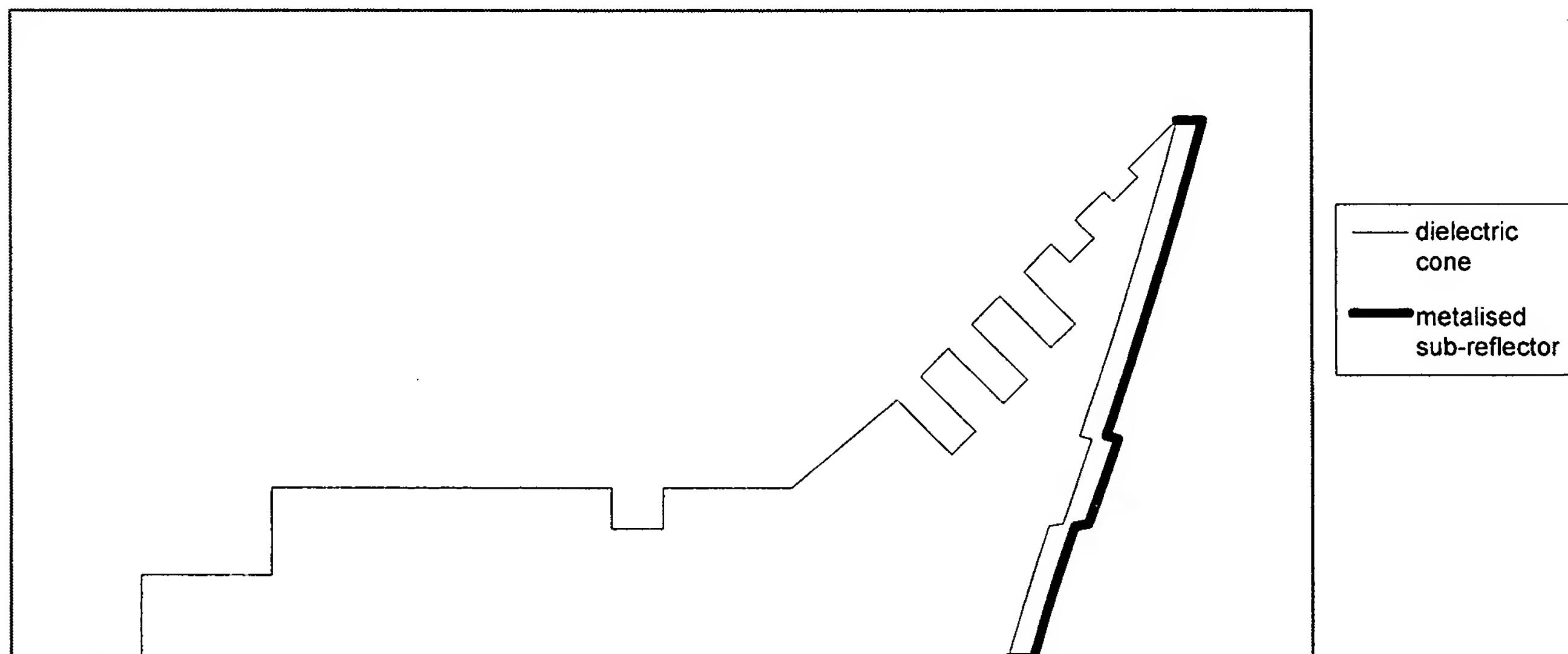


Fig. 11b: Etheta and EPhi Amplitude Radiation Patterns

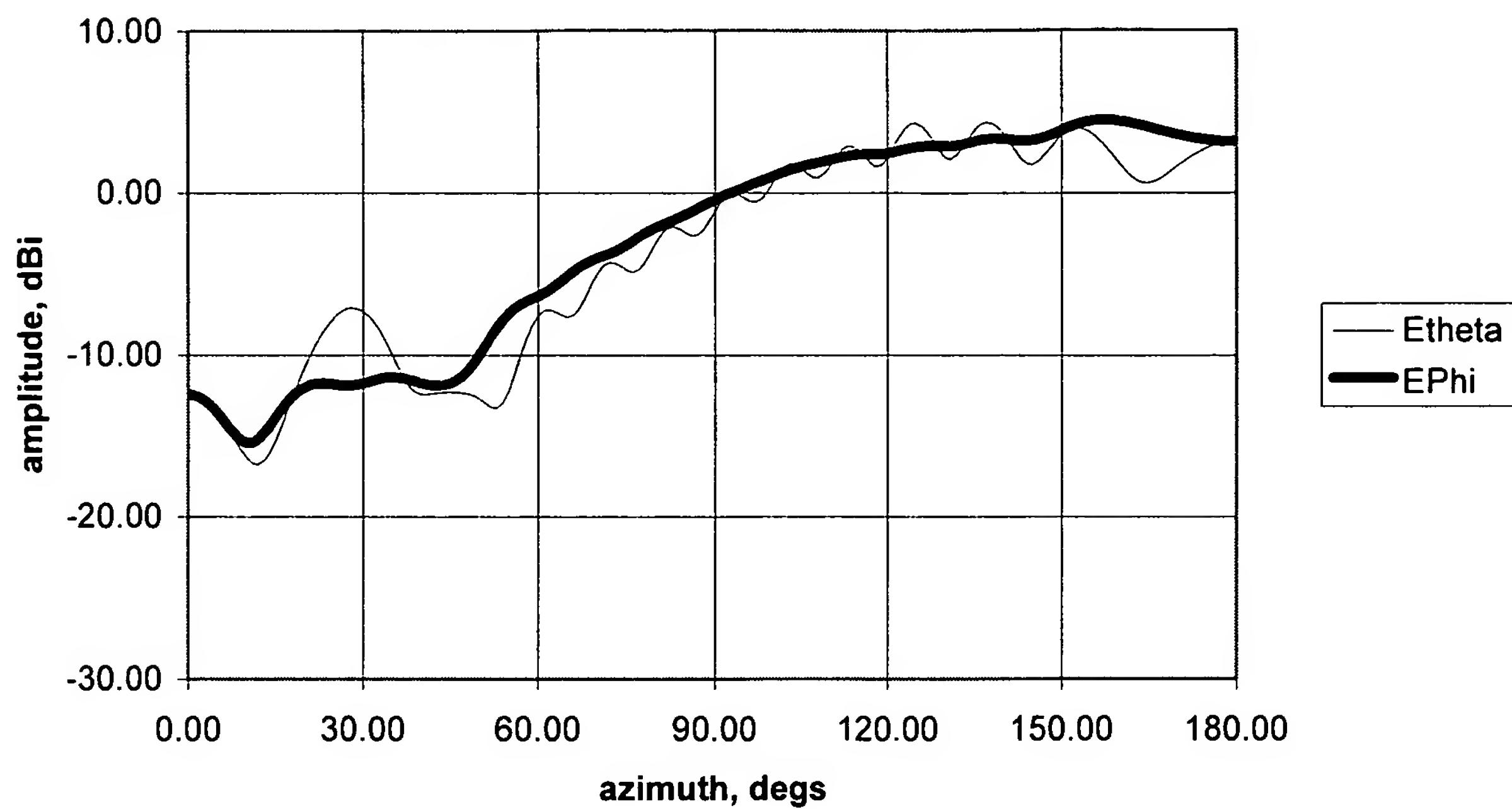


Fig. 11c: Etheta and EPhi Phase Patterns

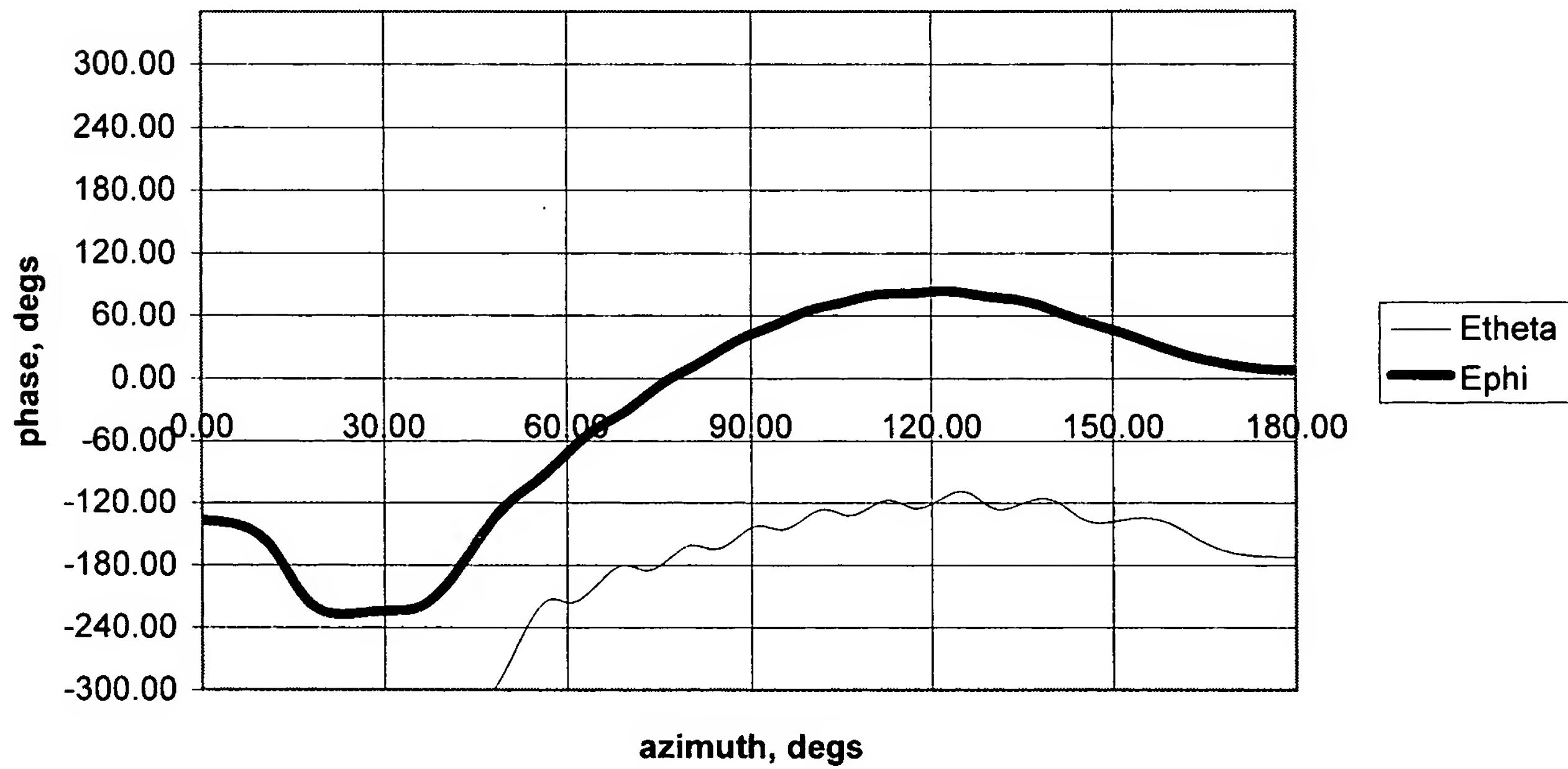


Fig. 12a: 5th Embodiment (F/D<0.2) typ.

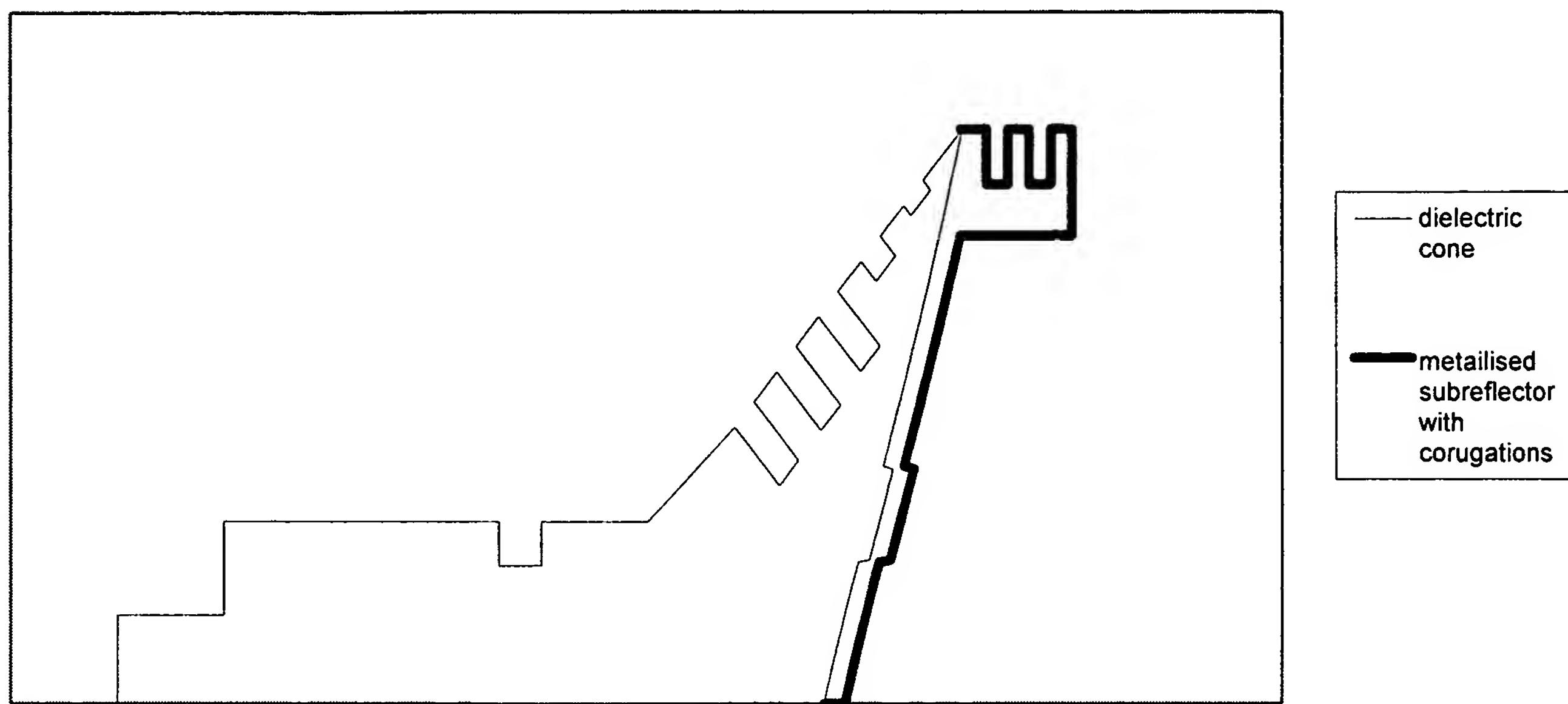


Fig. 12b: E θ and E ϕ Amplitude Radiation Patterns

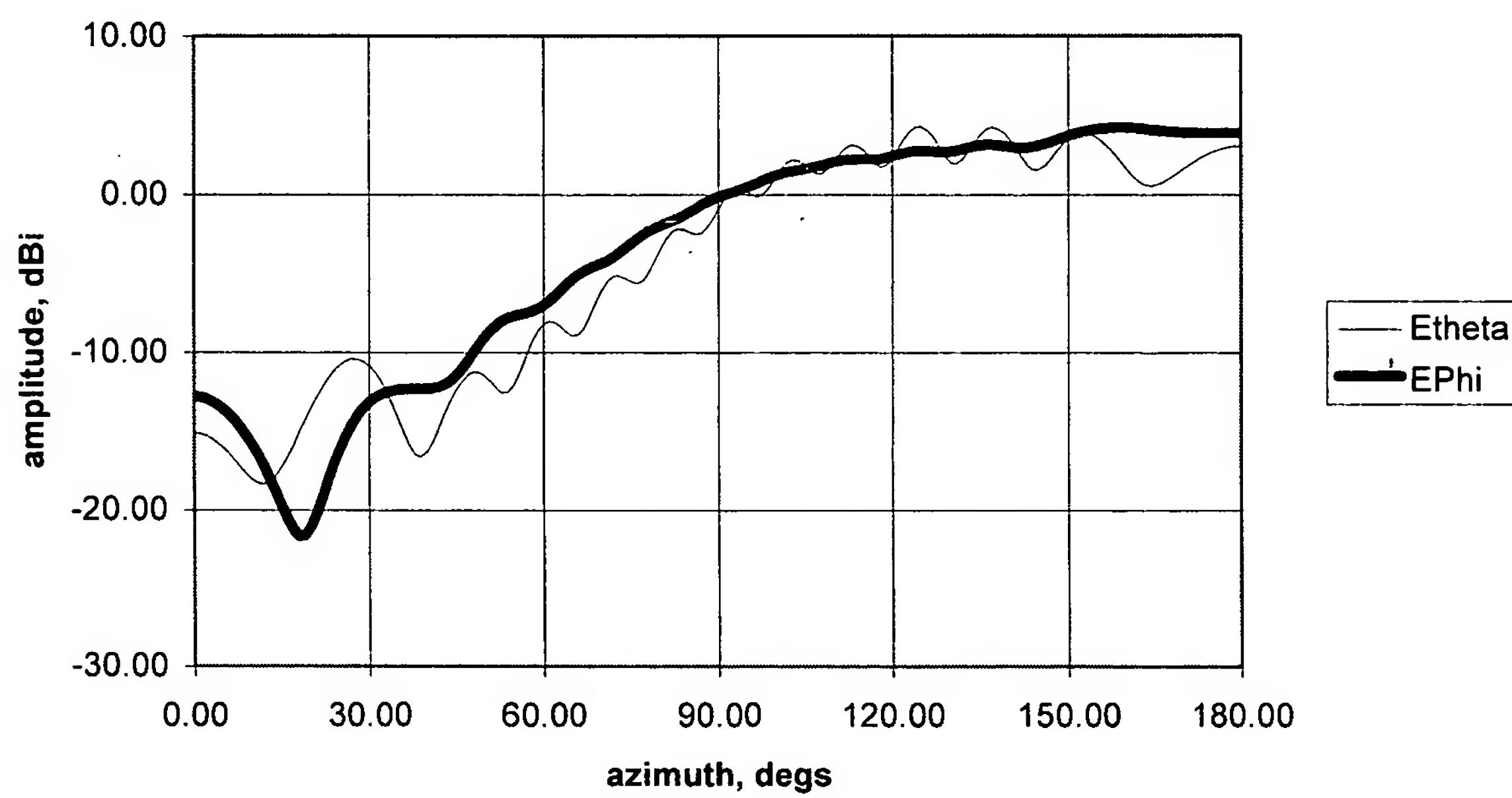


Fig. 12c: Etheta and Ephi Phase Patterns

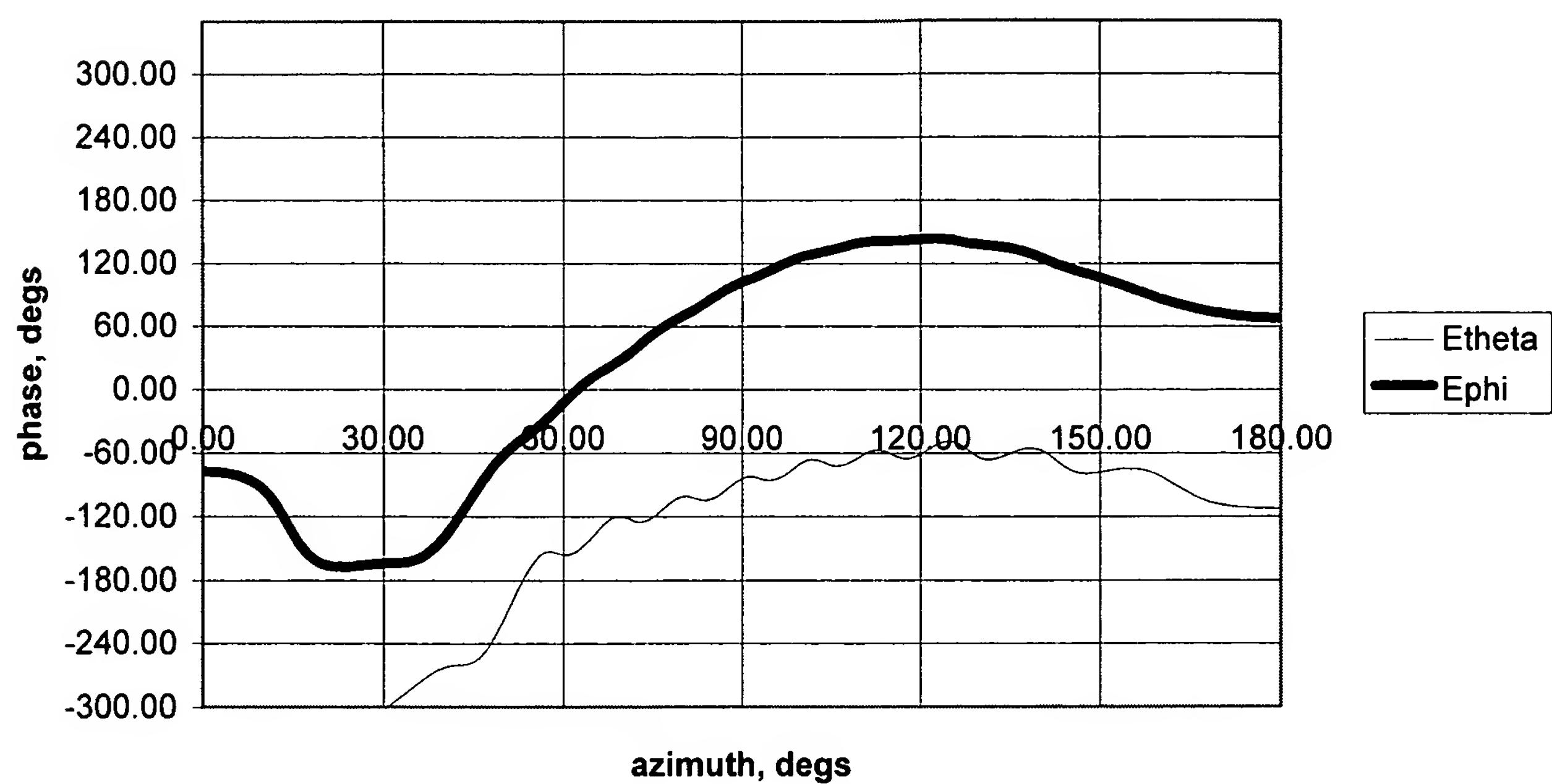


Fig. 13a: 6th Embodiment ($F/D < 0.2$) typ.

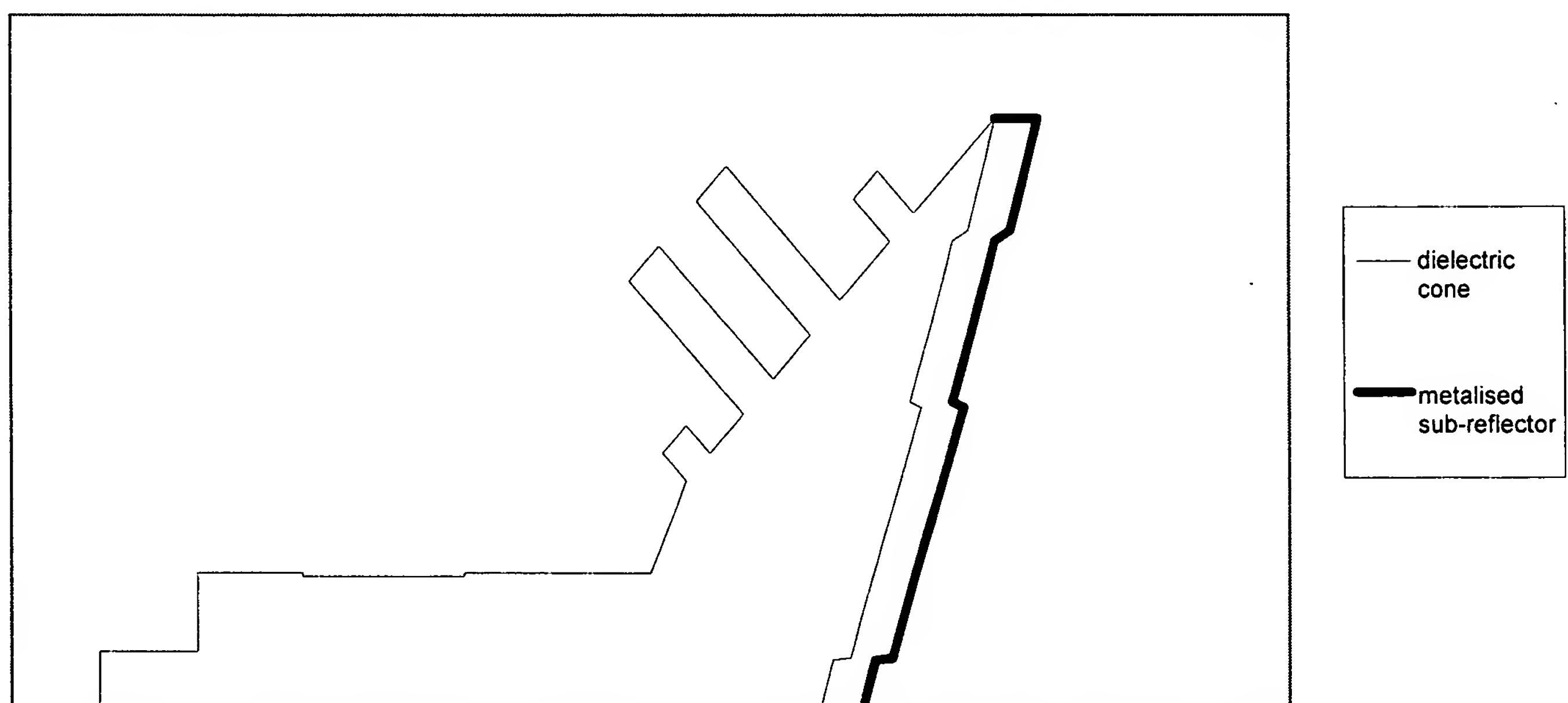


Fig. 13b: Etheta and EPhi Amplitude Radiation Patterns

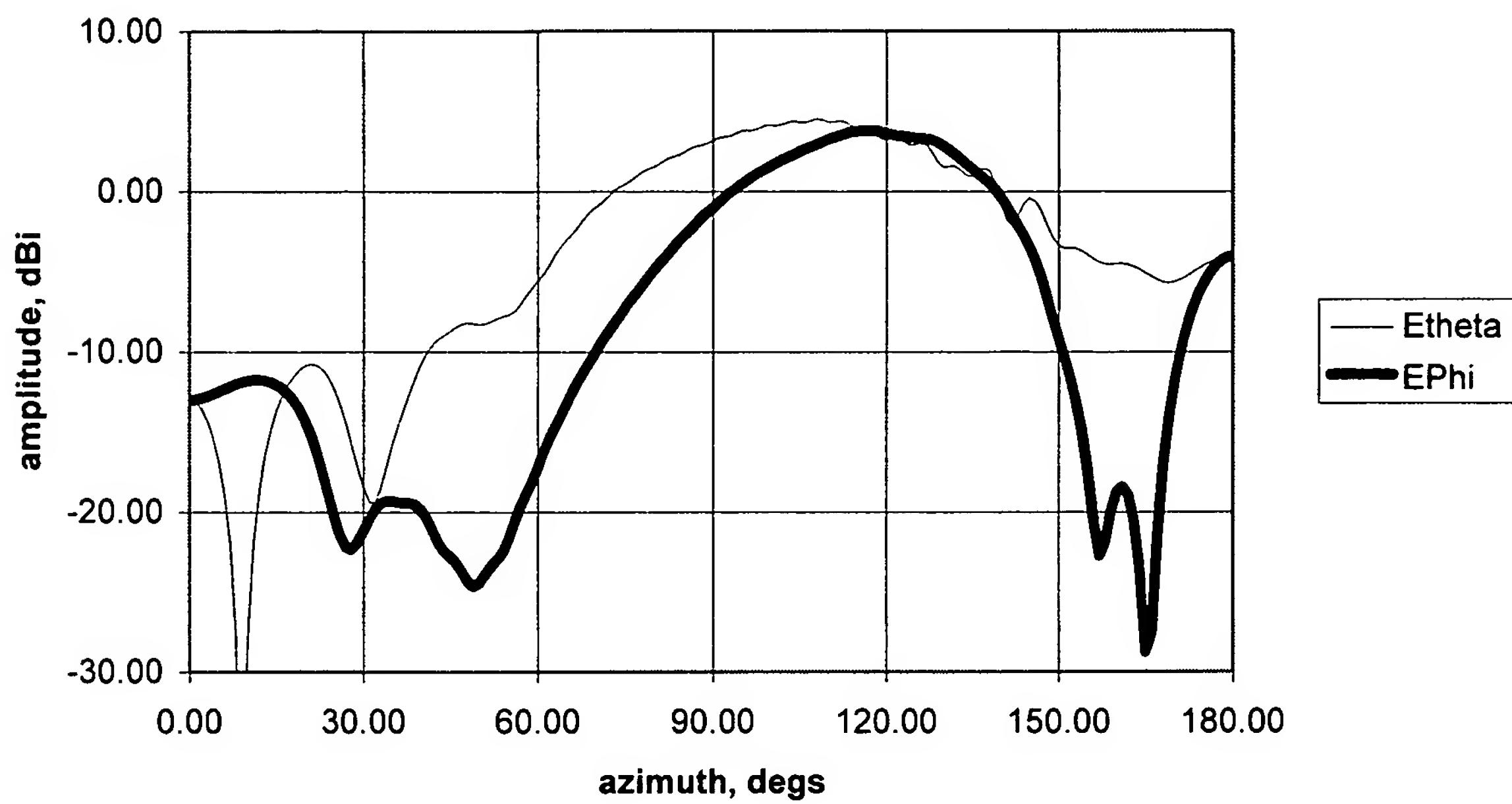


Fig. 13c: Etheta and EPhi Phase Patterns

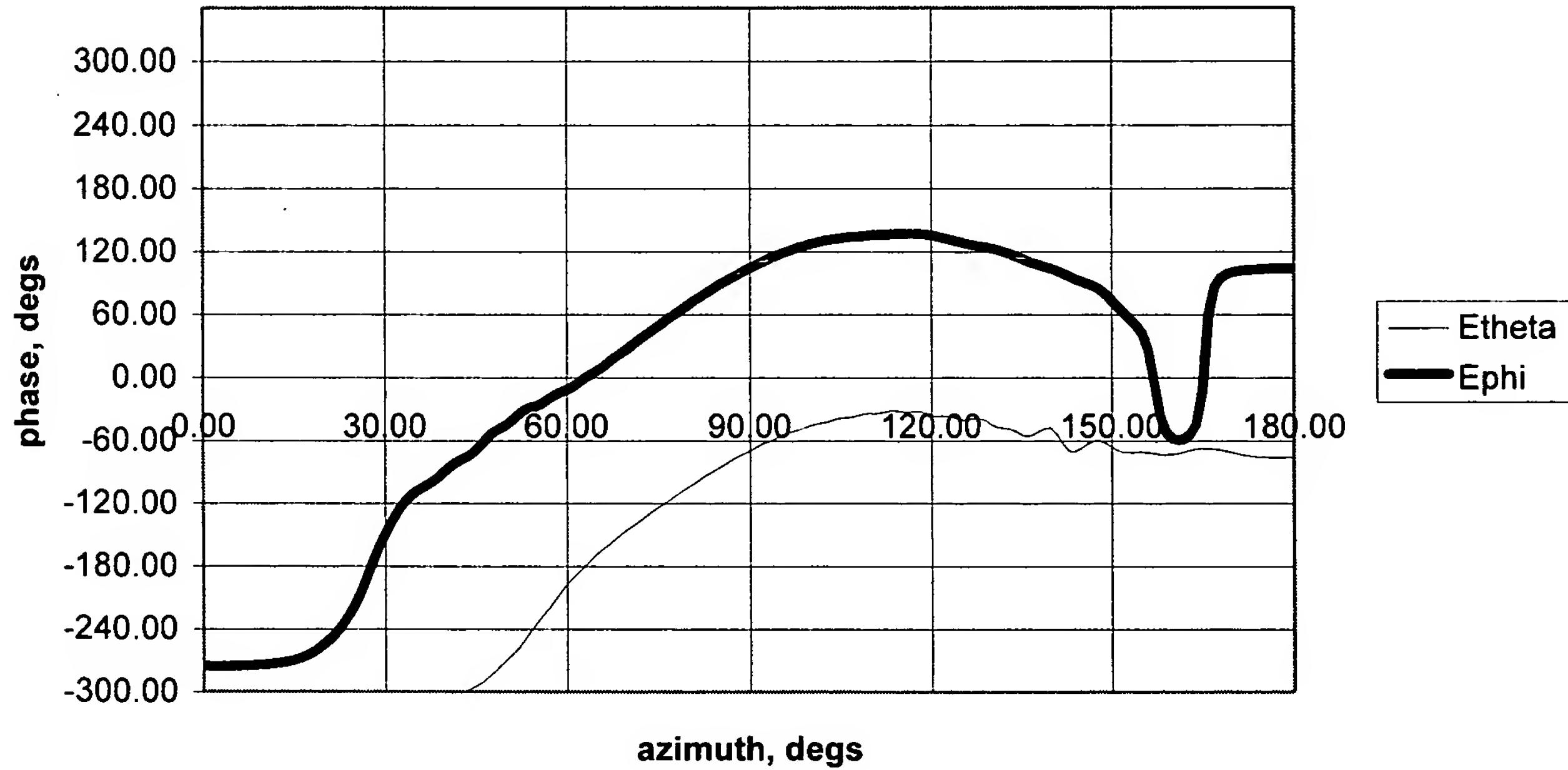


Fig. 13d: 38GHz 1' Measured Radiation Patterns of 6th Embodiment: E-plane vs ETSI and FCC specs

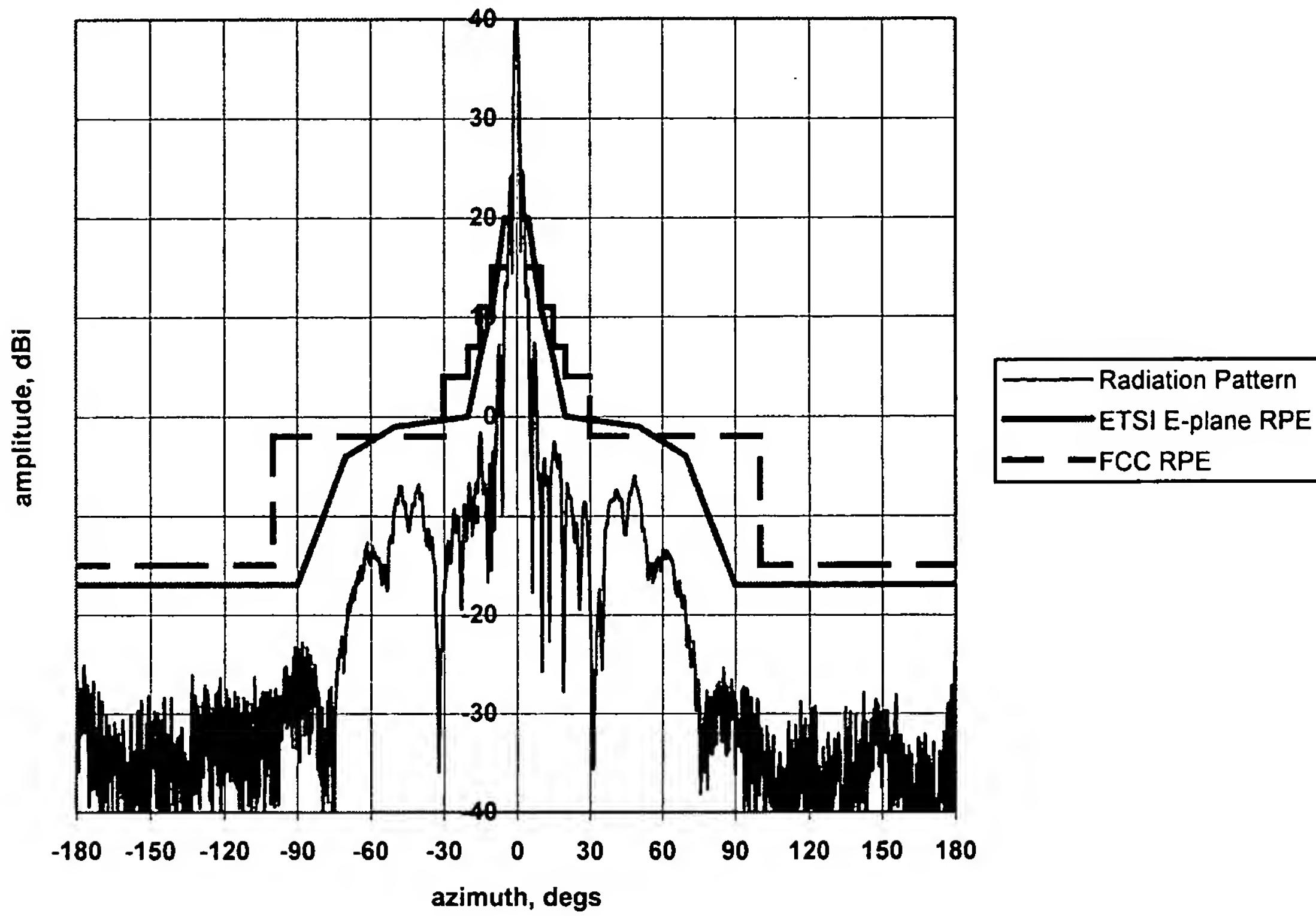


Fig. 13e: 38GHz 1' Measured Radiation Patterns of 6th Embodiment: H-plane vs ETSI and FCC specs

